Connecting the Dots to Combat Infant Mortality

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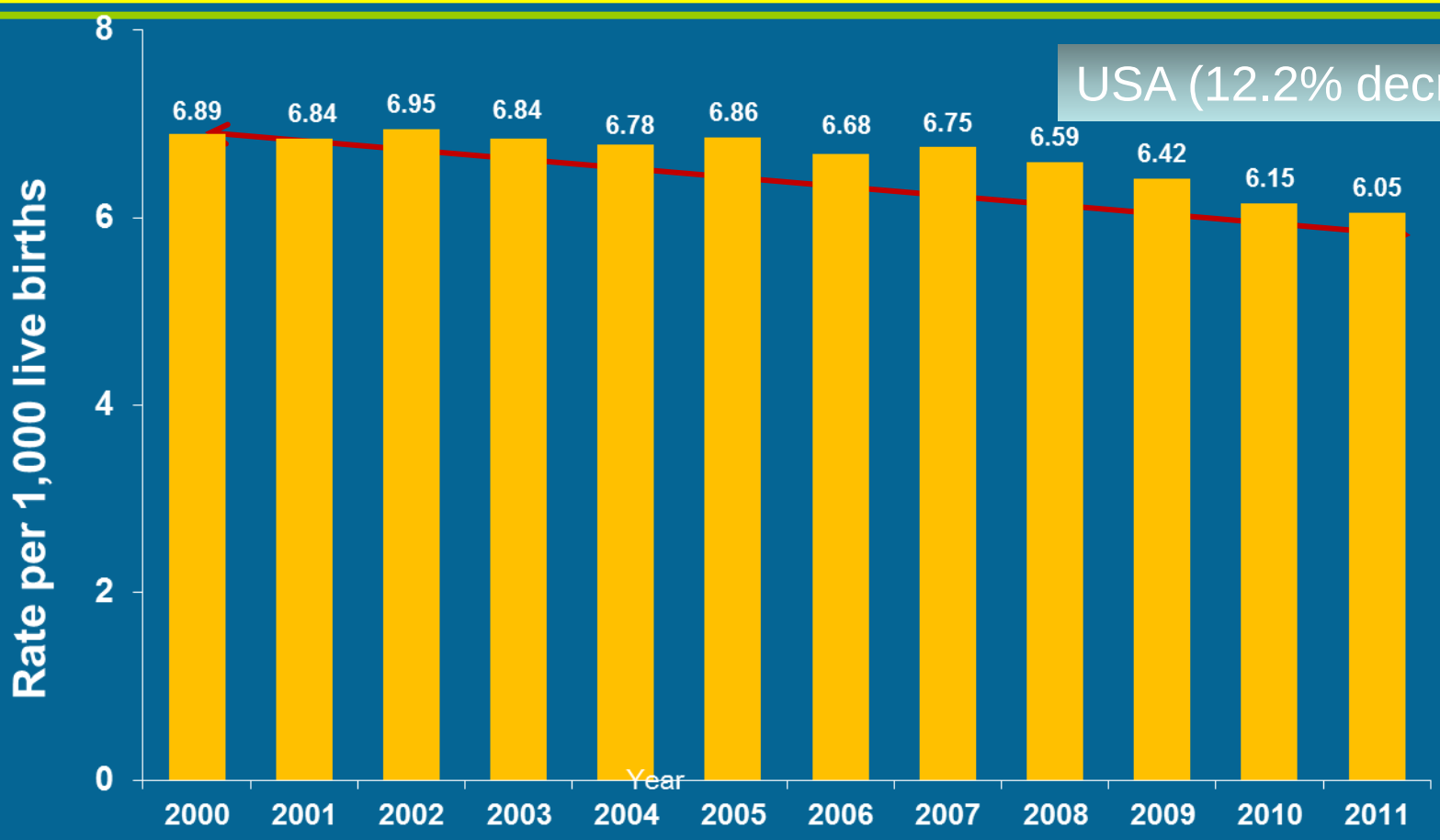
The 2014 Kansas Governor's Public Health Conference
Wichita, Kansas, April 30 to May 1, 2014

Combating Infant Mortality – Outline

- Current status; current practice
- Need to change
- New and re-emerging approaches:
  - Life-course approach
  - Preconception / Interconception health
  - CIlaborative Innovation Networks (COINS)
  - Collective impact
  - Backbone organizations
- Applications:
  - Currently implementing:
    - The Infant Mortality COIIN
  - Under Development:
    - National Maternal Health Initiative / Improving Maternal Health and Safety
    - Clinical Guidelines for Well Women Visit
    - Healthy Start 3.0

Infant Mortality Rate, U.S., 2000-2011



Year

Sources: *Hoyert DL, Xu JQ. Deaths: Preliminary data for 2011. National vital statistics reports; vol 61 no 6. Hyattsville, MD: National Center for Health Statistics. 2012. and, Murphy SL, Xu JQ, Kochanek KD. Deaths: Final data for 2010. National vital statistics reports; vol 61 no 4. Hyattsville, MD: National Center for Health Statistics. 2013.*

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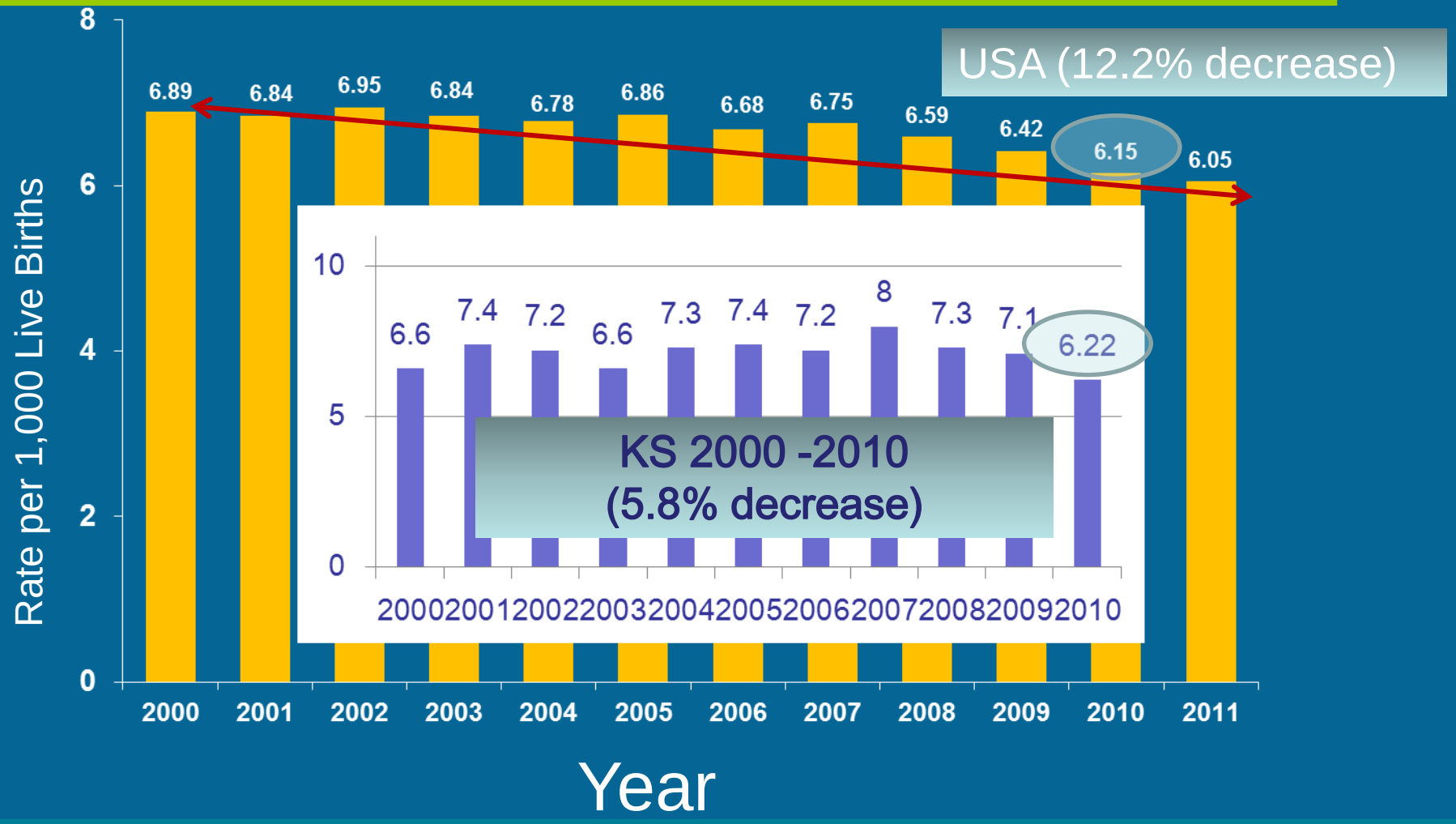
Infant Mortality Rate, U.S., 2000-2011, and Kansas 2000-2010



Kansas Data: Peristats and http://www.cdc.gov/nchs/pressroom/states/ks_2013.pdf

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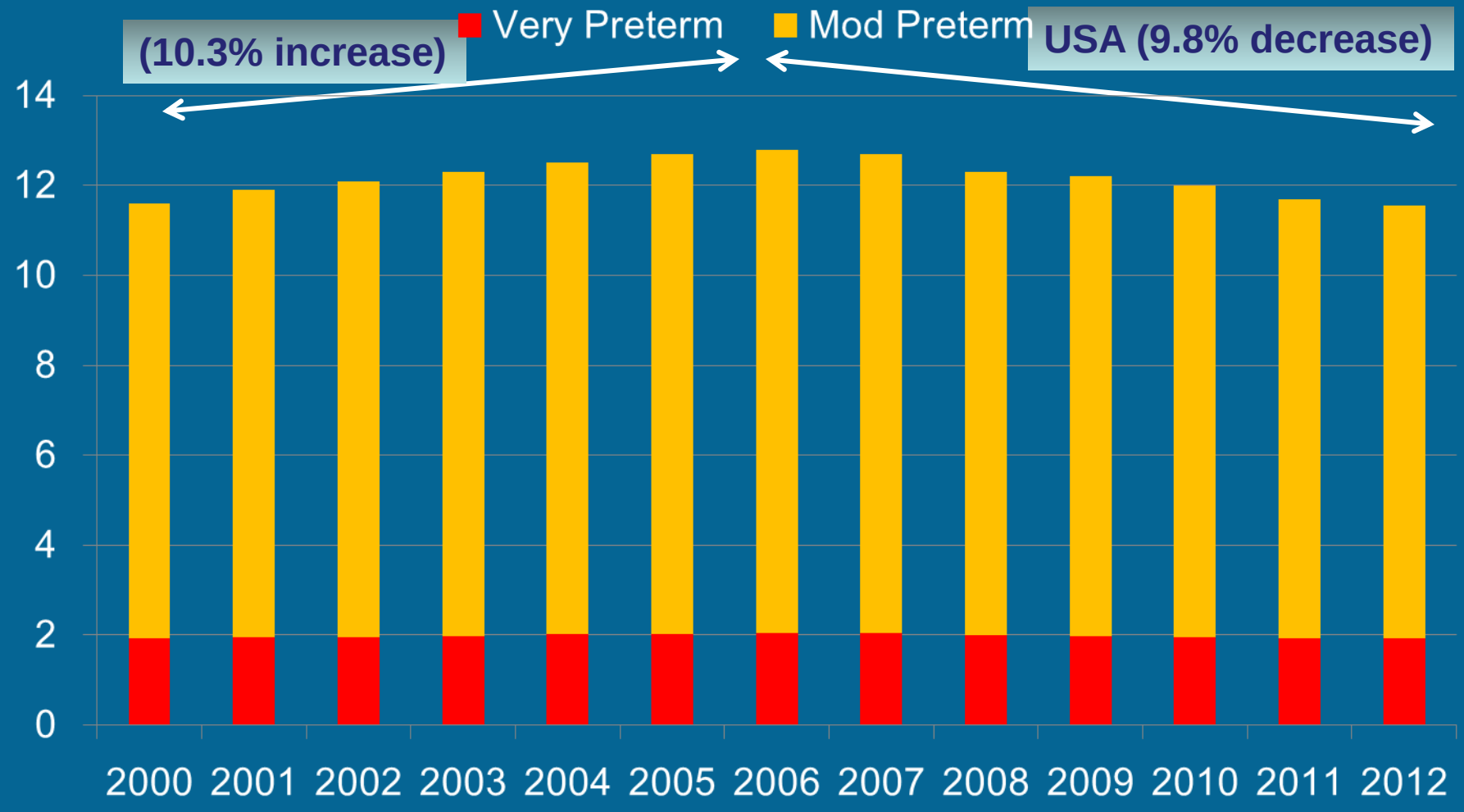
Percentage of Births that were Very Preterm or Preterm, United States, 2000-2012



Source: Martin JA, Hamilton BE, Osterman JK, et al. Births: Final data for 2012. National vital statistics reports; vol 62 no 9. Hyattsville, MD: National Center for Health Statistics. 2013.

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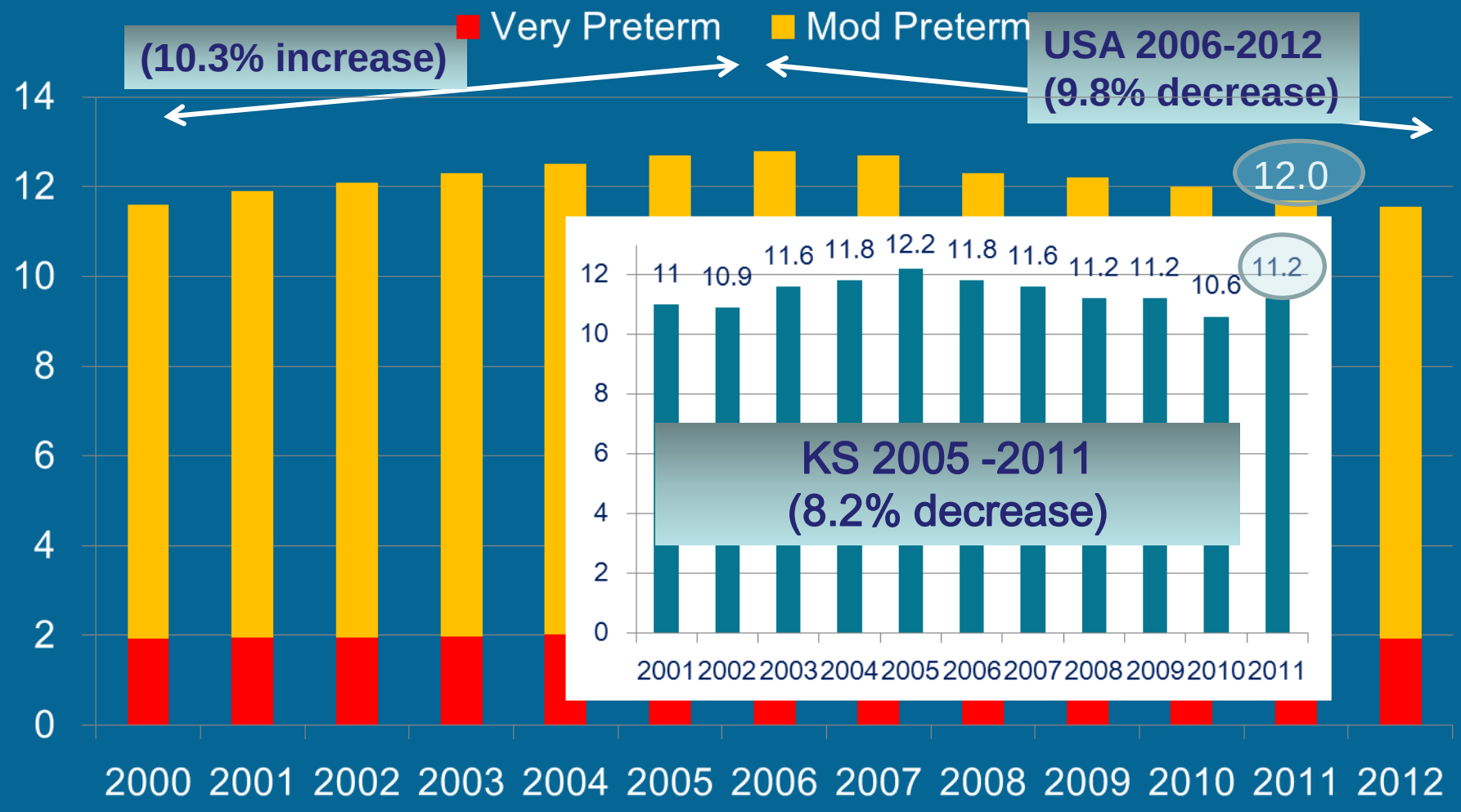
Percentage of births that were Preterm, United States 2000-2012, and Kansas 2001-2011



Kansas Data: Peristats and http://www.cdc.gov/nchs/pressroom/states/ks_2013.pdf

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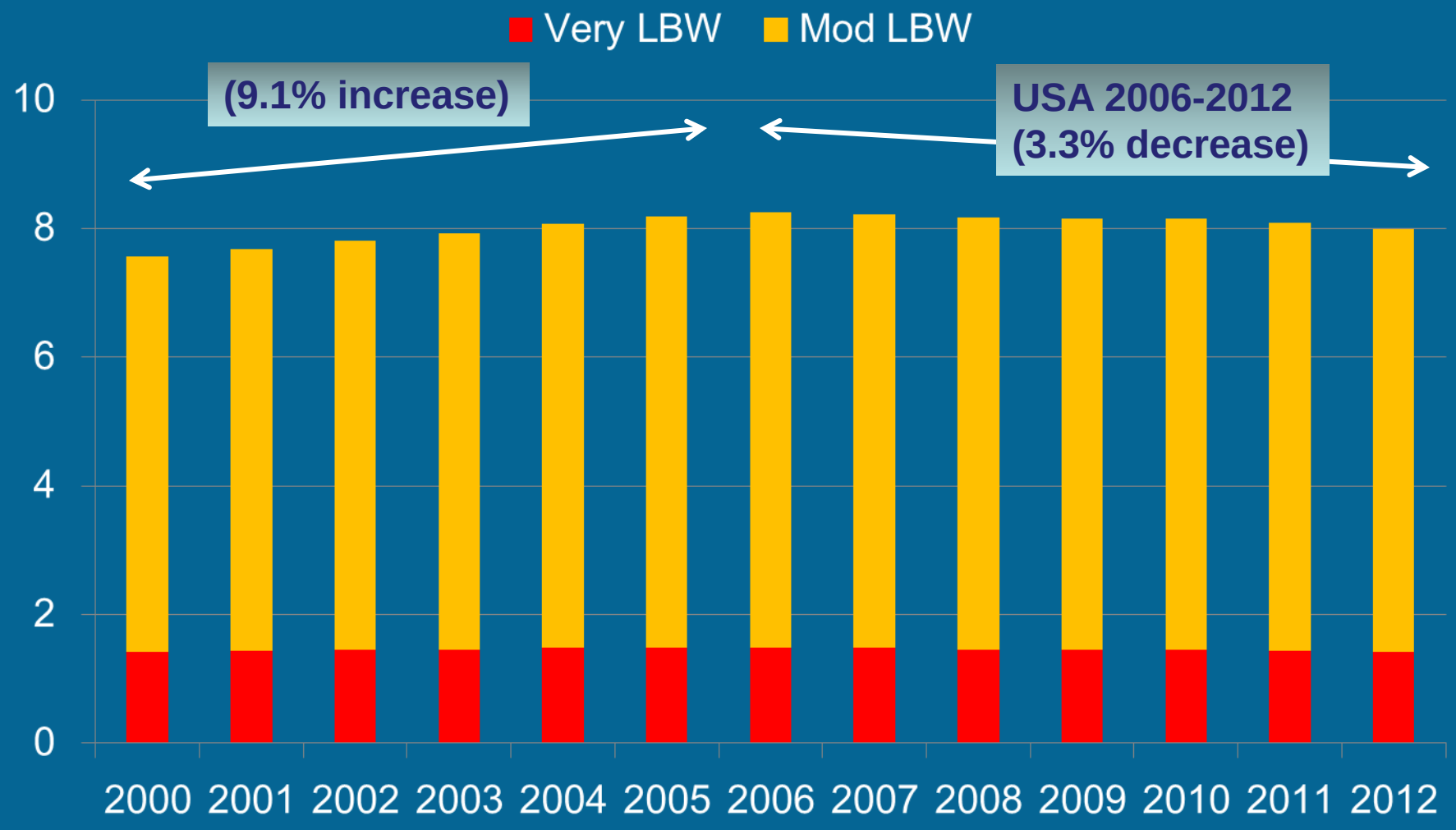
Percentage of Births that were Very Low Birthweight or Low Birthweight, United States, 2000-2012



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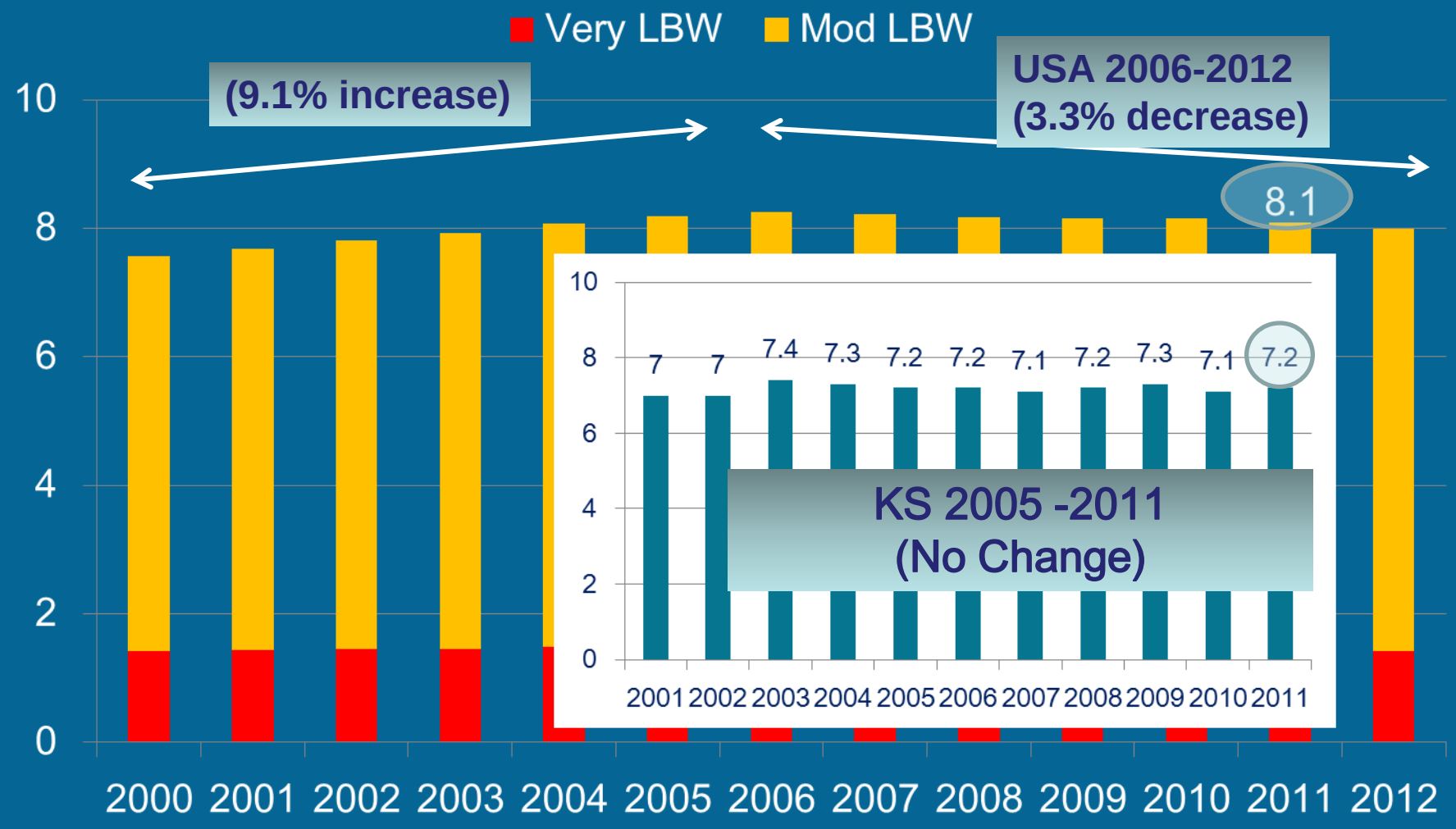
Percentage of Births that were Low Birthweight, United States, 2000-2012 and Kansas 2001-2011



Kansas Data: Peristats and http://www.cdc.gov/nchs/pressroom/states/ks_2013.pdf

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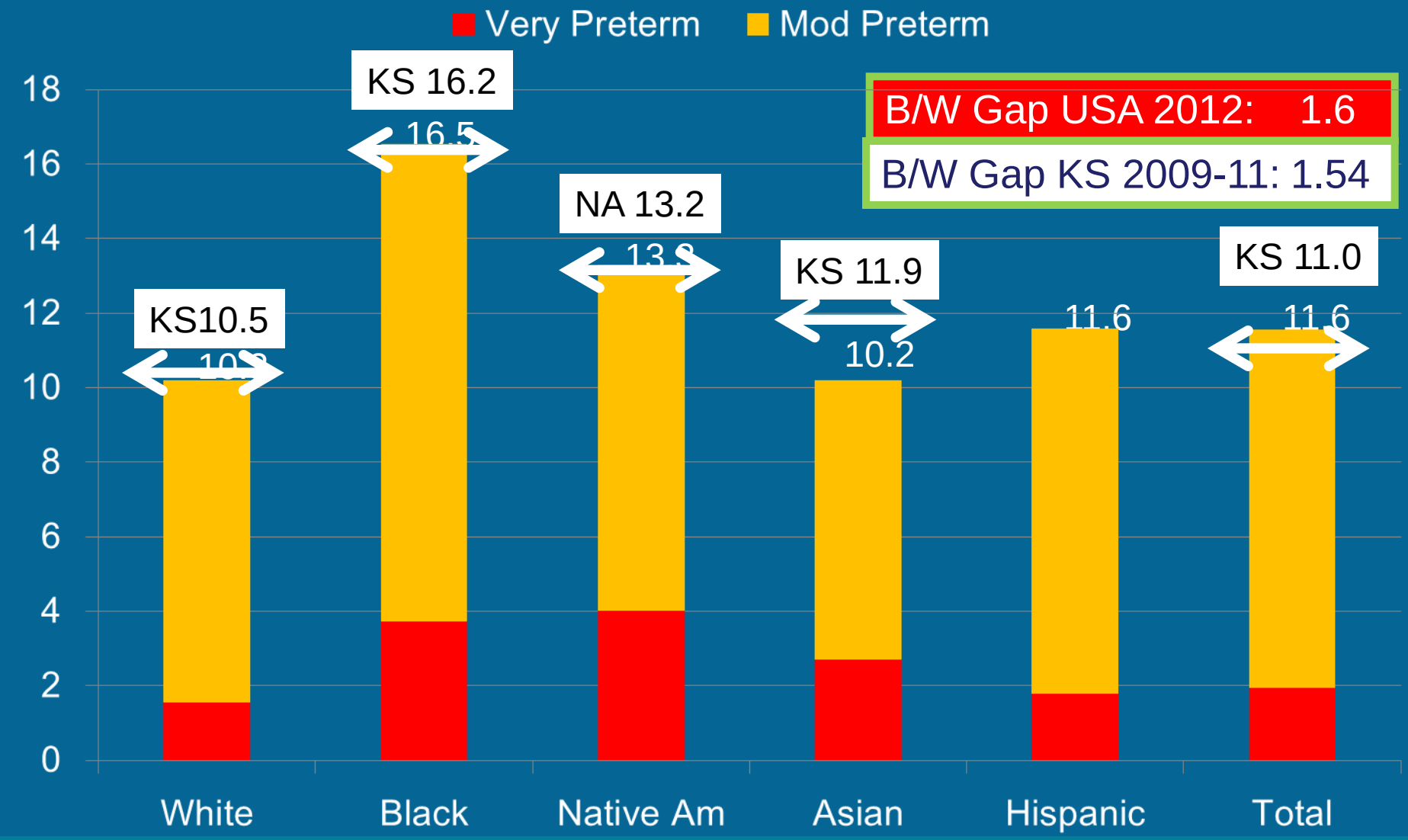
We made significant progress
But
We can do more!

Continuing challenges:

- Persistent health disparities
- Worse maternal outcomes
- Other countries have achieved better outcomes

Preterm births by maternal race/ethnicity United States 2012



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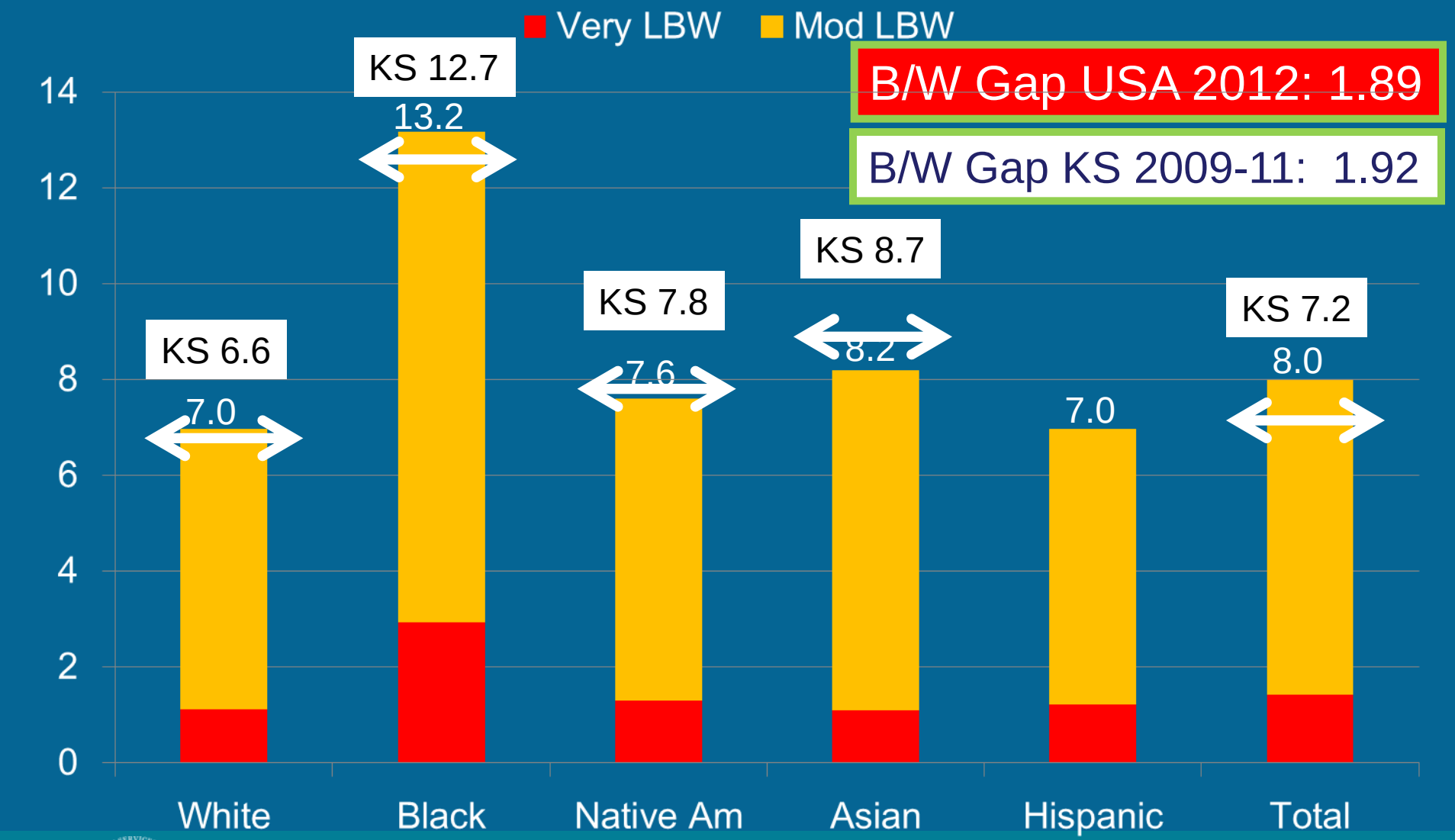
Low birthweight births by maternal race/ethnicity - United States 2012



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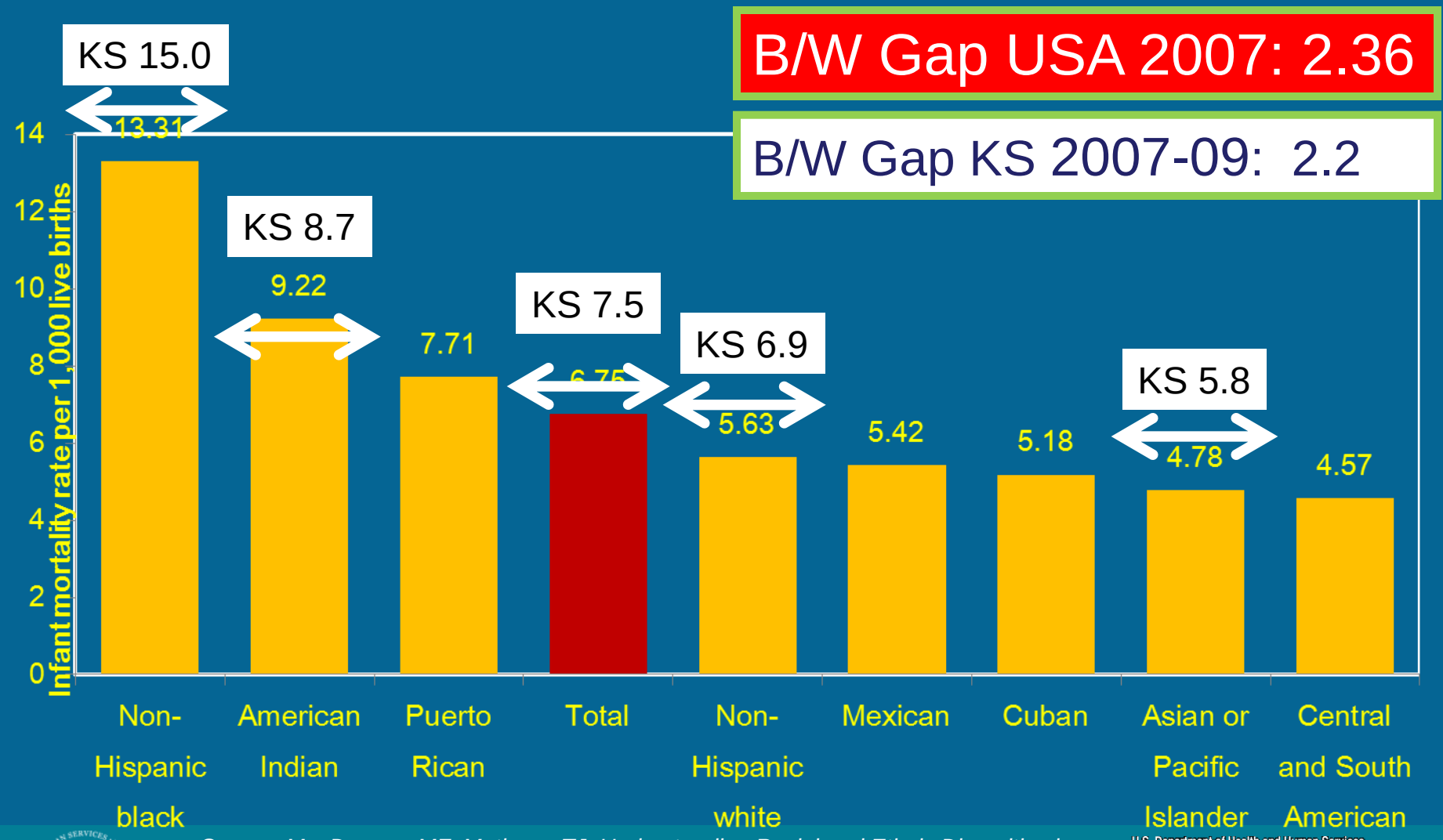
Infant Mortality Rates by Race/Ethnicity, United States 2007



Source: MacDorman MF, Mathews TJ. Understanding Racial and Ethnic Disparities in U.S. Infant Mortality Rates. NCHS Data Brief no. 74. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2011. gov/nchs/data/databriefs/db74.htm.

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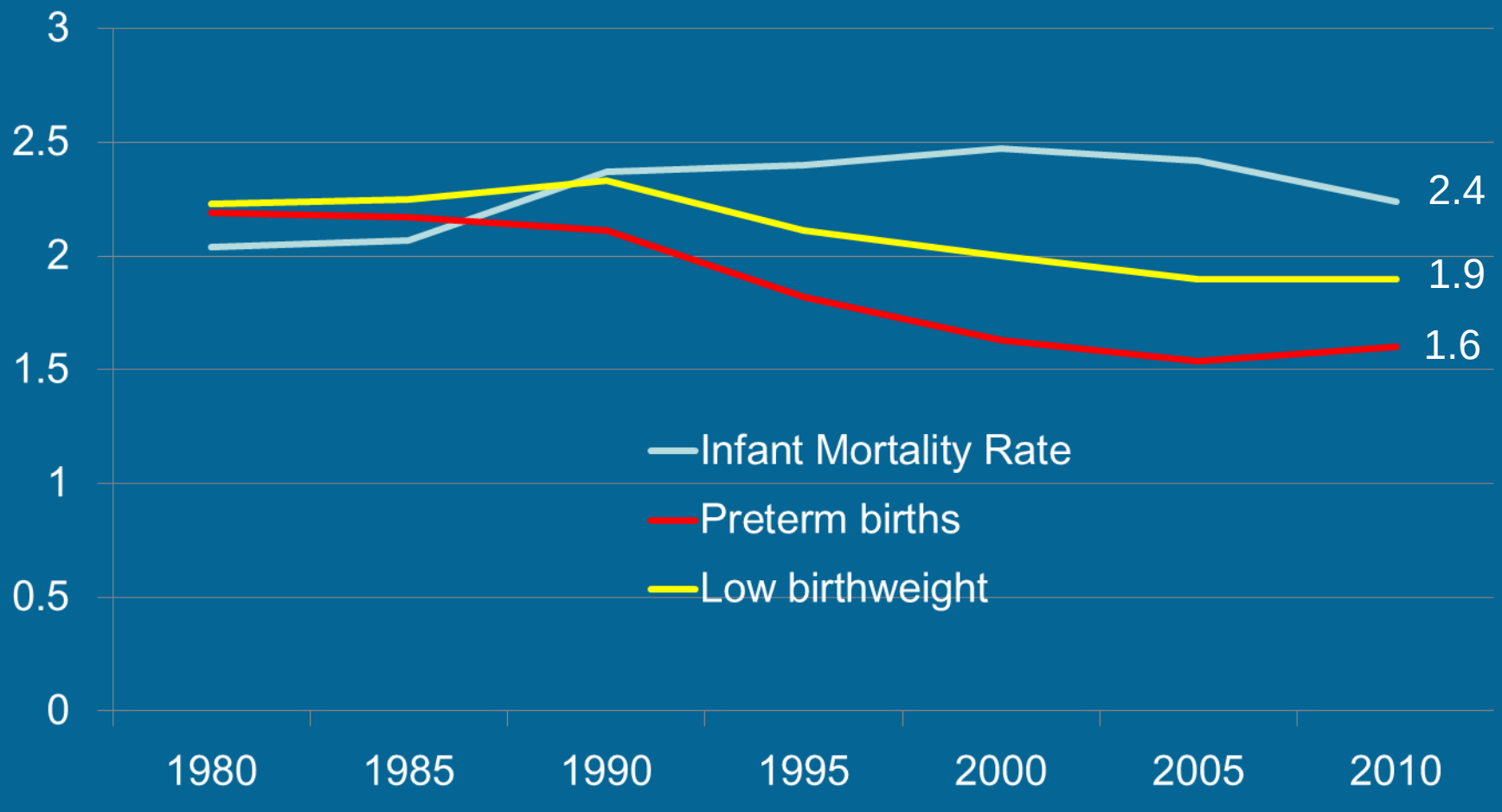
Black-White disparities in perinatal outcomes - United States 1980 to 2010



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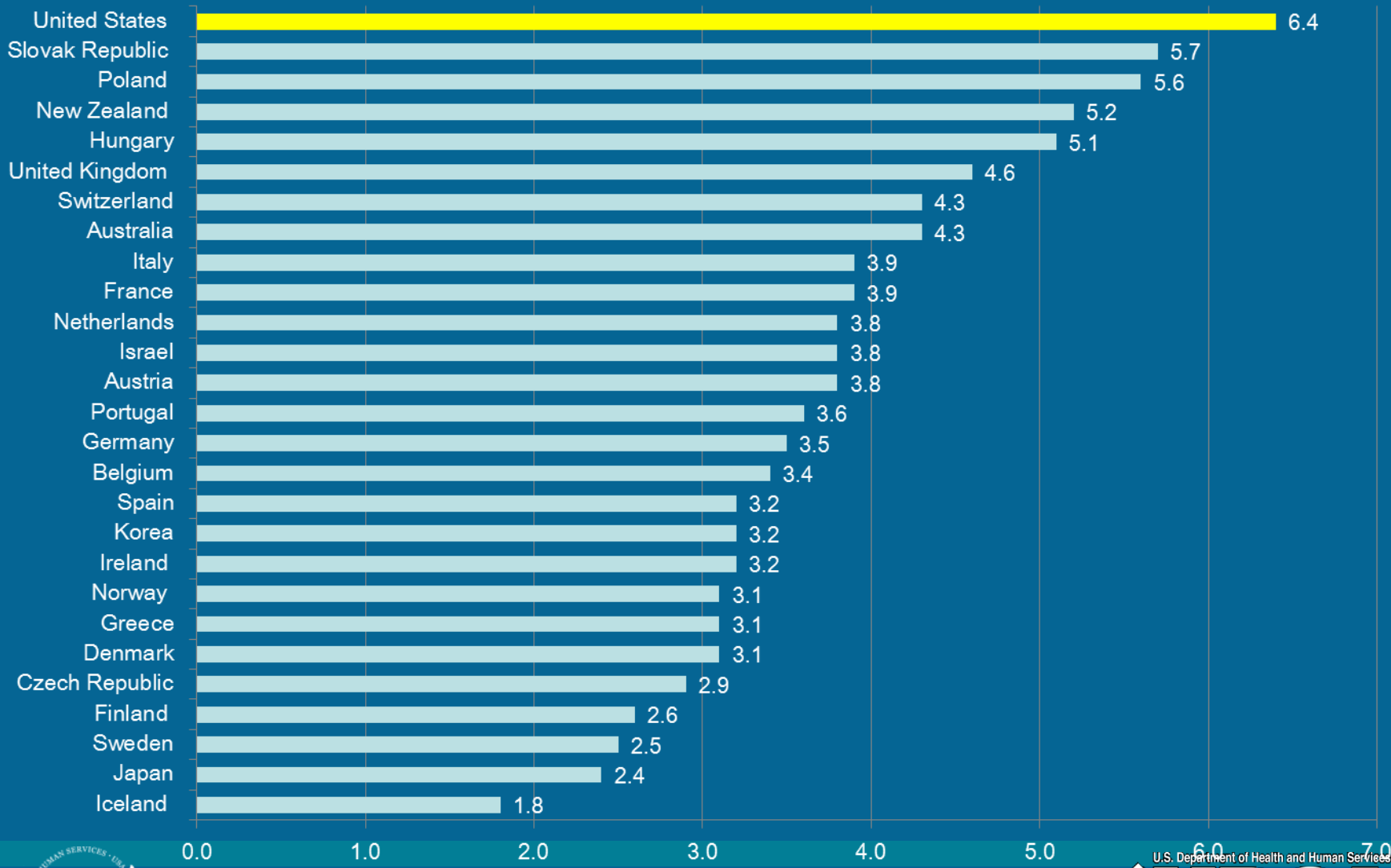
Infant mortality rates and international rankings: Organisation for Economic Co-operation and Development (OECD) countries (27 countries), 2009



Source: National Center for Health Statistics. Health, United States, 2012: With Special Feature on Emergency Care. Hyattsville, MD. 2013.

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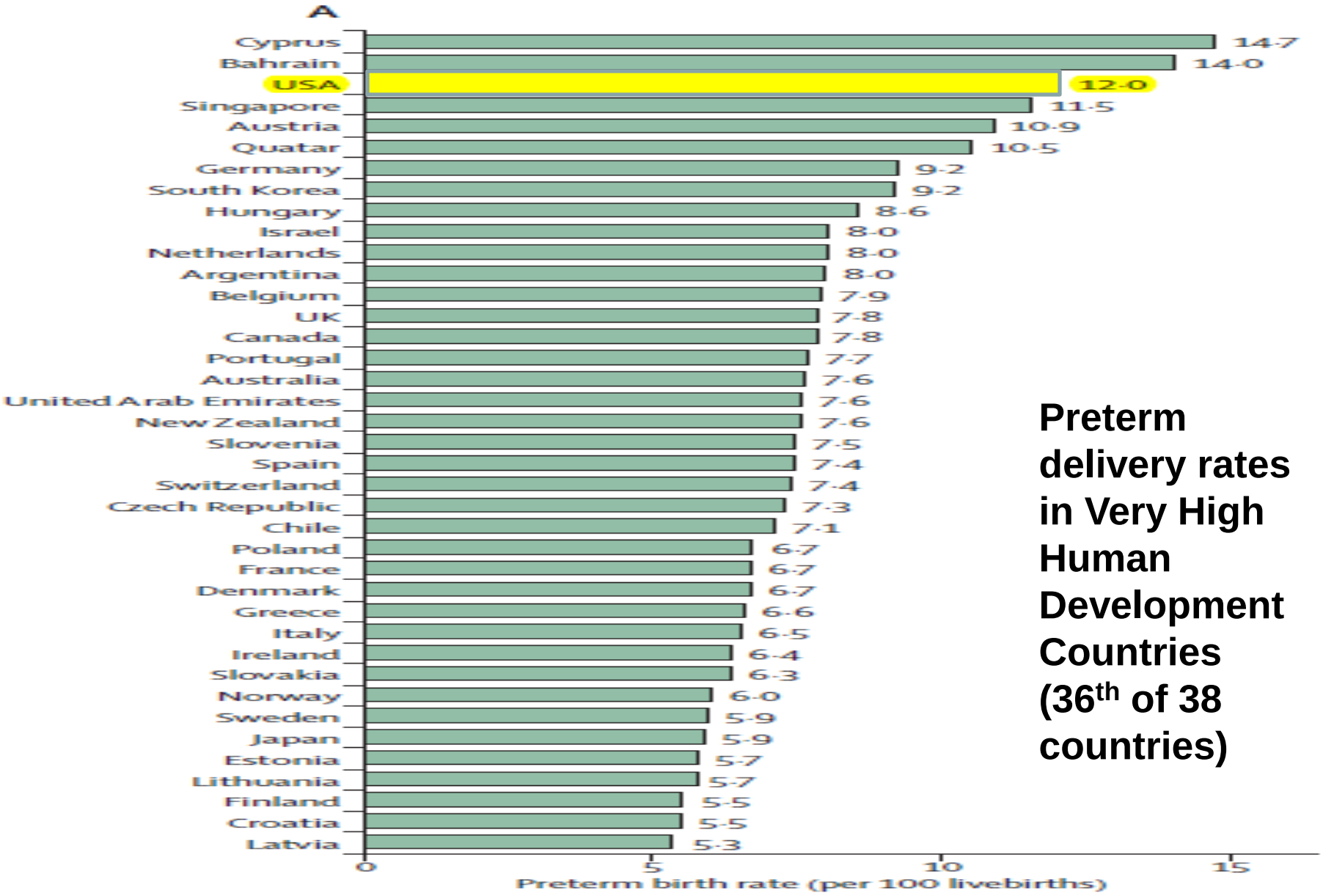

Preterm delivery rates in Very High Human Development Countries (36th of 38 countries)

Source: Chang HH et al: Preventing preterm births: analysis of trends and potential reductions with interventions in 39 countries with very high human development index. Lancet. Published online November 17, 2012

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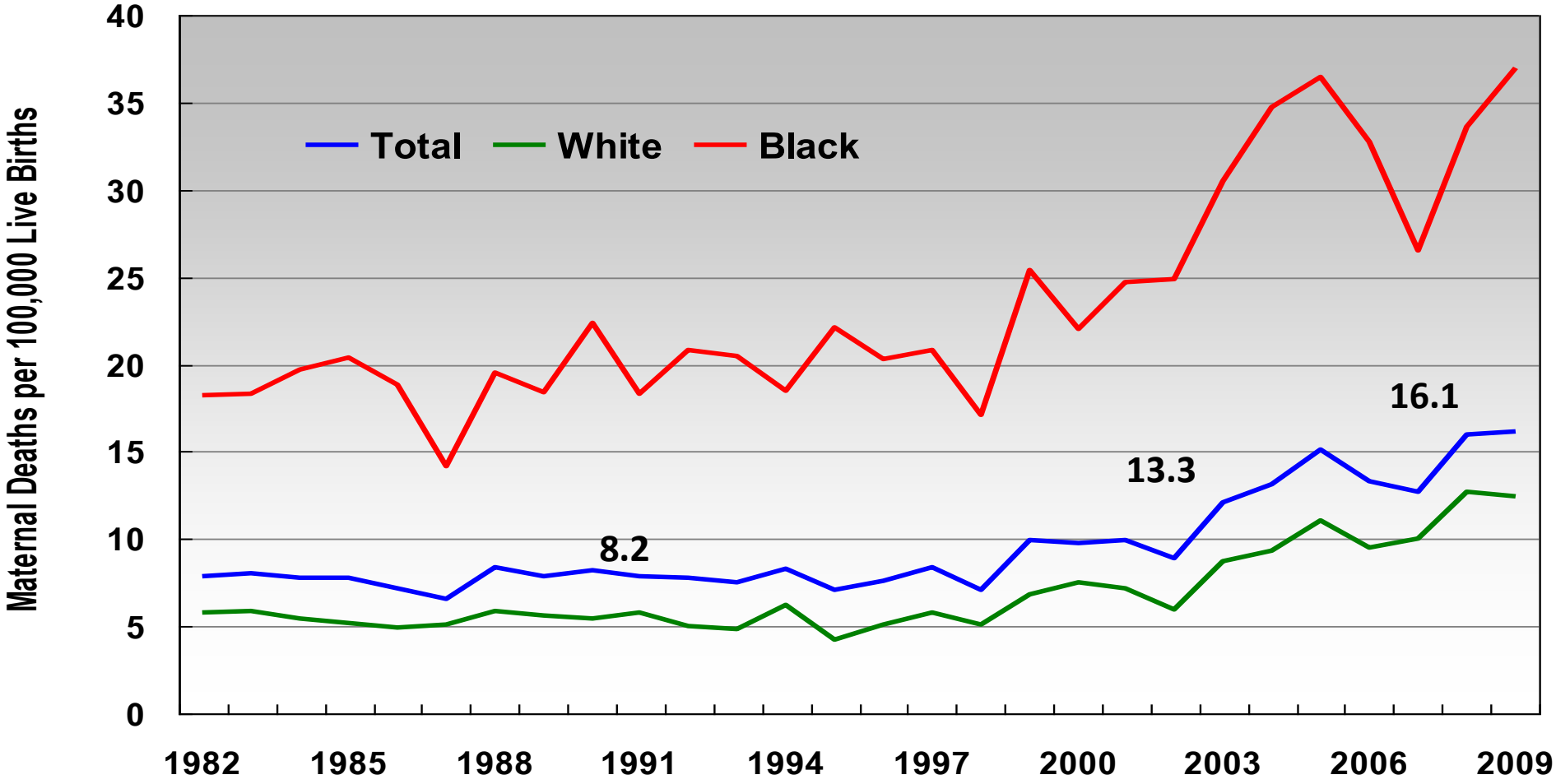
Infant Mortality Rankings (Ascending) – 1960-2002; Selected Countries (Health United States 2010)

	1960	1970	1980	1990	2000	2004	2008
1	Sweden	Sweden	Sweden	Japan	Singapore	Singapore	Iceland
2	Netherlands	Netherlands	Japan	Finland	Hong Kong	Hong Kong	Sweden
3	Norway	Norway	Finland	Sweden	Japan	Japan	Finland
4	Czech Rep.	Japan	Norway	Hong Kong	Sweden	Sweden	Japan
5	Australia	Finland	Denmark	Singapore	Finland	Norway	Greece
6	Finland	Denmark	Netherlands	Switzerland	Norway	Finland	Norway
7	Switzerland	Switzerland	Switzerland	Canada	Spain	Spain	Canada
8	Denmark	New Zealand	France	Norway	Czech Rep.	Czech Rep.	Czech Republic
9	Eng. & Wales	Australia	Canada	Germany	Germany	France	Italy
10	New Zealand	France	Australia	Netherlands	Italy	Portugal	Portugal
11	USA	Engl. & Wales	Ireland	France	France	Germany	Spain
12	Scotland	Canada	Hong Kong	Denmark	Austria	Greece	Germany
13	N. Ireland	Israel	Singapore	N. Ireland	Belgium	Italy	Republic of Korea
14	Canada	Hong Kong	Engl. & Wales	Spain	Switzerland	Netherlands	Austria
15	France	Ireland	Scotland	Scotland	Netherlands	Switzerland	Belgium
16	Slovakia	Scotland	Belgium	Austria	N. Ireland	Belgium	France
17	Ireland	USA	Spain	Engl. & Wales	Australia	Denmark	Ireland
18	Japan	Czech Rep.	Germany	Belgium	Canada	Austria	Israel
19	Israel	Belgium	USA	Australia	Denmark	Israel	Netherlands
20	Belgium	Singapore	New Zealand	Ireland	Israel	Australia	Denmark
21	Singapore	Germany	N. Ireland	Italy	Portugal	Ireland	Switzerland
22	Germany	N. Ireland	Austria	New Zealand	Engl. & Wales	Scotland	Australia
23	Cuba	Slovakia	Italy	USA	Scotland	Eng. &Wales	United Kingdom
24	Austria	Austria	Israel	Greece	Greece	Canada	New Zealand
25	Greece	Bulgaria	Czech Rep.	Israel	Ireland	N. Ireland	Hungary
26	Hong Kong	Puerto Rico	Greece	Cuba	New Zealand	New Zealand	Poland
27	Puerto Rico	Spain	Puerto Rico	Czech Republic	USA	Cuba	Slovak Republic
28	Spain	Greece	Cuba	Portugal	Cuba	Hungary	USA
29	Italy	Italy	Bulgaria	Slovakia	Poland	USA	Chile
30	Bulgaria	Hungary	Costa Rica	Puerto Rico	Slovakia	Poland	Turkey
31	Hungary	Poland	Slovakia	Bulgaria	Hungary	Slovakia	Mexico
32	Poland	Cuba	Russian Fed.	Hungary	Puerto Rico	Puerto Rico	
33	Costa Rica	Romania	Hungary	Costa Rica	Costa Rica	Chile	
34	Romania	Portugal	Portugal	Chile	Chile	Costa Rica	
35	Portugal	Costa Rica	Poland	Russian Fed.	Bulgaria	Russian Fed.	

U.S. Maternal Mortality



Source: Singh GK. Maternal Mortality in the United States. A 75th Anniversary Title V Publication. HRSA 2010


Maternal Mortality
Maternal Morbidity

Severe Maternal Morbidity

- Severe maternal morbidity increased by 75% and 114% for delivery and postpartum hospitalizations respectively from 1998-99 to 2008-09

- Rates increased during delivery hospitalizations for:
  - Thrombotic embolism (72%)
  - Respiratory distress syndrome (75%)
  - Cardiac surgery (75%)
  - Acute renal failure (97%)
  - Shock (101%)
  - Blood transfusion (183%)
  - Aneurysms (195%)

Callaghan et al: Severe maternal morbidity among delivery and postpartum hospitalizations in the United States. Obstet Gynecol 120:1029-36, 2012

Why Are Maternal Morbidity and Mortality Rising?

- Better surveillance and improved detection
- Demographics of childbearing are changing
  - Assisted reproductive technology
  - Advances in medicine
- Women are entering pregnancy with more chronic conditions

Risk factors for adverse pregnancy outcomes among women who recently delivered a live-born baby – PRAMS 2004 – Preconception health conditions and behaviors

Behavior /Condition	%		Behavior /Condition	%
Overweight or obese	35		Previous preterm delivery	11.9
Diabetes	1.8			
Asthma	6.9		Tobacco (3 months bef preg)	23.2
Hypertension	2.2		Alcohol (3 months bef preg)	50.1
Heart problems	1.2		Multivitamins (>=4/week)	35.1
Anemia	10.2		No contraception / not planning	53.1
Previous Low Birth weight	11.6		Pre-pregnancy counseling	30.3

Centers for Disease Control and Prevention: Preconception and Interconception Health Status of Women Who Recently Gave Birth to a Live-Born Infant --- Pregnancy Risk Assessment Monitoring System (PRAMS), United States, 26 Reporting Areas, 2004. MMWR 2007:56(SS10);1-35

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TABLE 3. ADJUSTED ODDS RATIOS AND PREDICTIVE MARGINALS FOR SELECTED HEALTH INDICATORS, COMPARING 2007–2010 TO 2003–2006, NONPREGNANT WOMEN, 18–44 YEARS, BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2003–2010 (*N*=547,177)

	2003–2006 (n=275,630) Predictive marginal (95% CI)	*2007–2010 (n=271,547) Predictive marginal (95% CI)*	*aOR (95% CI)*
Behavioral			
Any alcohol use	55.0 (54.8–55.4)	52.6 (52.2–53.0)	0.90 (0.88–0.92)
Binge drinking	13.3 (13.0–13.5)	15.4 (15.2–15.7)	1.20 (1.16–1.24)
Heavy drinking	5.3 (5.1–5.5)	5.0 (4.8–5.1)	0.94 (0.89–0.98)
Smoking	22.1 (21.8–22.4)	19.4 (19.1–19.7)	0.84 (0.81–0.86)
Excellent, very good, good general health	89.5 (89.2–89.7)	88.8 (88.6–89.1)	0.94 (0.90–0.97)
5 or more daily fruit/vegetable servings	25.0 (24.6–25.5)	25.7 (25.3–26.2)	1.04 (1.01–1.07)
Mental distress	13.1 (12.9–13.4)	13.3 (13.0–13.5)	1.02 (0.98–1.05)
Social/emotional support	80.3 (79.9–80.8)	81.1 (80.8–81.4)	1.05 (1.02–1.09)
Moderate or vigorous activity	50.9 (50.4–51.5)	52.0 (51.5–52.6)	1.05 (1.01–1.08)
Any medical condition	36.9 (36.5–37.2)	40.3 (39.9–40.7)	1.16 (1.13–1.19)
Clinical			
HIV test	55.8 (55.4–56.2)	56.1 (55.7–56.5)	1.01 (0.99–1.04)
Annual routine checkup	67.8 (67.3–68.3)	67.1 (66.8–67.5)	0.97 (0.94–1.01)
Influenza shot	18.8 (18.5–19.1)	27.8 (27.5–28.1)	1.68 (1.64–1.73)

Adjusted for race, age, marital status, education, income, employment, health insurance.
aOR, adjusted odds ratio.

* diabetes, high blood pressure, asthma, or obesity

Source: Xaverius PK, Salas J. Surveillance of Preconception Health Indicators in Behavioral Risk Factor Surveillance System: Emerging Trends in the 21st Century. Journal of Women's Health. Volume 22, Number 3, 2013 203-209

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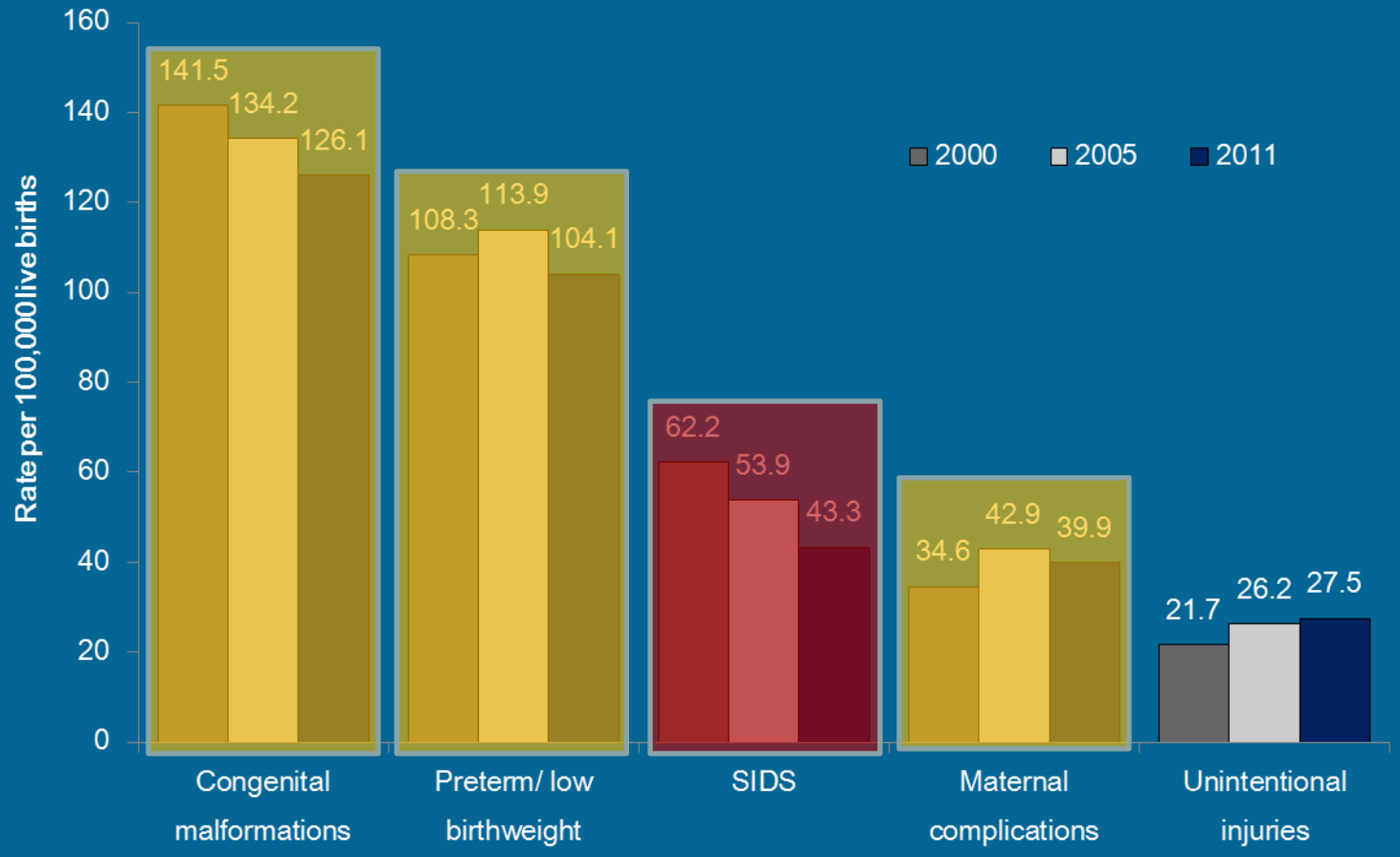
Infant Mortality Rates for the Five Leading Causes of Death, United States, 2000, 2005, and 2011



Source: CDC/NCHS, Mortality Data. 2011 data are preliminary.
Prepared by MacDorman for SACIM, November 2012.

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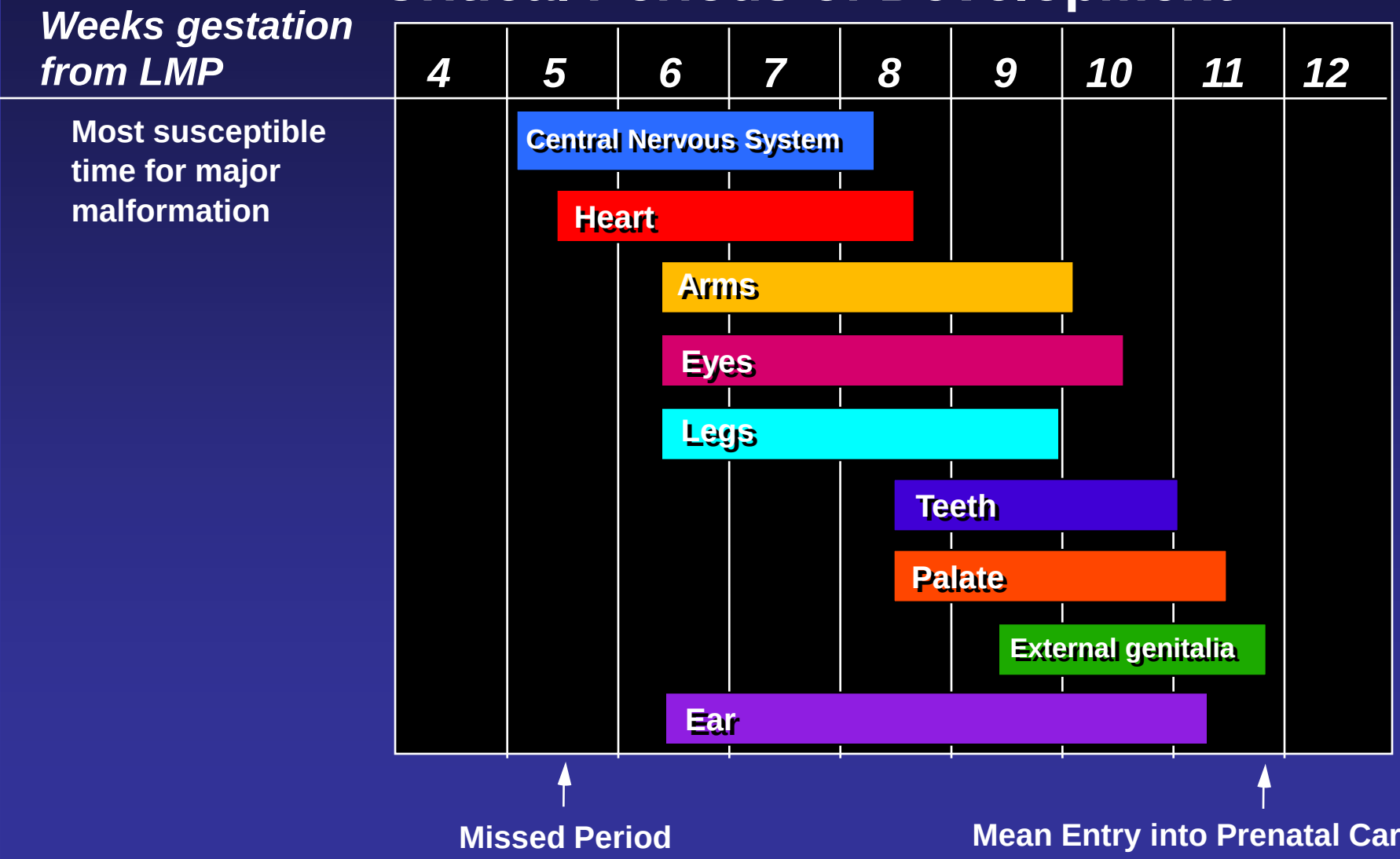
Contributors to Pregnancy Outcomes

- **Current socioeconomic status:** household income, occupational status, or parental educational attainment
- **Risky behaviors:** maternal cigarette smoking, delayed and inadequate utilization of prenatal care, alcohol and drug use
- **Maternal conditions:** psychological stress, stressful life events or perceived stress or anxiety during pregnancy, perinatal infection, chronic conditions

We Currently Intervene Too Late

Critical Periods of Development



Early prenatal care is not enough, and in many cases it is too late!

Combating Infant Mortality – Current Practices

- Action during and immediately after pregnancy
- Focus on single / isolated interventions
- Action follows resources – vertical funding encourages isolated interventions
- Partnerships and collaborations have limited scope

How do we proceed from here?

- Work smarter not just harder
- Change what we do and how we do it
- Adopt / adapt emerging and re-emerging evidence-based models of practice

Working smarter

- What we do - Work beyond the 9 months of pregnancy:
  - Comprehensive women's health
  - Preconception / interconception
  - Across the life span - "Life-course approach"
- How we do it:
  - Circles of influence
  - COINs
  - Collective impact

Preconception / Interconception Health - Goal

To promote the health of women of reproductive age before conception and thereby improve maternal and infant pregnancy outcomes

Definition of Preconception Care

A set of interventions that aim to identify and modify biomedical, behavioral, and social risks to a woman's health or pregnancy outcome through prevention and management, emphasizing those factors which must be acted on before conception or early in pregnancy to have maximal impact.

Source: Recommendations to Improve Preconception Health and Health Care — United States: A Report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. MMWR 55 (RR-6), 2006.

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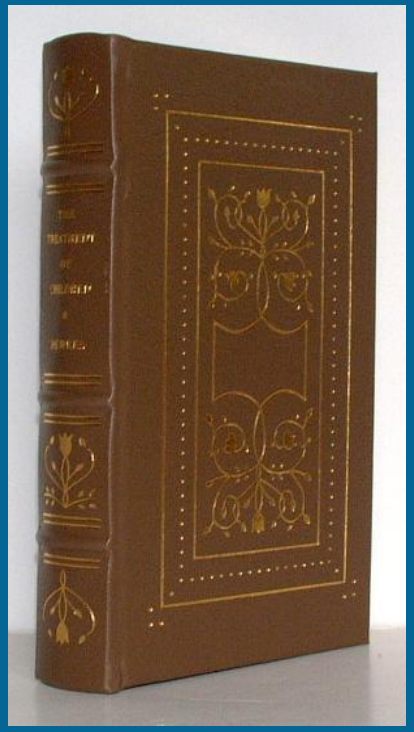
Not a New Concept



THE PHYSICAL AND MEDICAL TREATMENT OF CHILDREN
The Classics of Pediatrics Library
Gryphon Editions

Author: William P. Dewees, M. D. (1768-1841) credited with having written the first American pediatric textbook

"The physical treatment of children should begin as far as may be practicable, with the earliest formation of the embryo; it will, therefore, necessarily involve the conduct of the mother, even before her marriage, as well as during her pregnancy."

William Potts Dewees 1825
first American textbook on Pediatrics

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There Is Consensus That We Must Act Before Pregnancy

- Recommendations and clinical practice guidelines have been published by many organizations

- MOD
- ACOG
- AAP
- AAFP

- **ACNM**
- **USPHS Expert Panel on the Content of PNC, 1989**
- **HP 2000**

- More than 30 organizations worked and continue to work together to promote PCC

ACOG/AAP (2002)

All health encounters during a woman's reproductive years, particularly those that are a part of preconceptional care should include counseling on appropriate medical care and behavior to optimize pregnancy outcomes.

ACOG/AAP Guidelines for perinatal care, 5th edition, 2002

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Preconception Interventions: Give protection

- **Folic Acid Supplements:** Reduce the occurrence of neural tube defects by two thirds
- **Rubella Immunization:** Provides protective sero-positivity and prevents the occurrence of congenital rubella syndrome
- **HIV/AIDS Screening and Treatment:** Allows for timely treatment; pregnancies can be better planned
- **Hepatitis B Vaccination:** Prevents transmission to infants in utero and eliminates the risk to women of hepatic failure, liver carcinoma, cirrhosis, and death.

Preconception Interventions: Manage conditions

- **Diabetes Management:** Reduces the 3-fold increase in birth defects among infants of women with type 1 and type 2 diabetes
- **Hypothyroidism Management:** Adjusting the dosage of Levothyroxine early in pregnancy protects proper neurological development
- **Maternal PKU Management:** Low phenylalanine diet before conception and throughout pregnancy prevents mental retardation in infants born to mothers with PKU
- **Obesity Control:** Reduces the risks of neural tube defects, preterm birth, diabetes, c-section, hypertensive and thromboembolic disease.
- **STDs Screening and Management:** Reduce the risk of ectopic pregnancy, infertility, PID, and chronic pelvic pain; also reduce the risk to the fetus of fetal death, or physical and developmental disabilities, including mental retardation and blindness.

Preconception Interventions: Avoid Teratogens

- **Alcohol use:** Fetal alcohol syndrome (FAS) and other alcohol-related birth defects can be prevented.
- **Anti-epileptic drugs:** Some anti-epileptic drugs are known teratogens – changing to a less teratogenic treatment regimen reduces harmful exposure.
- **Accutane use:** Use of Accutane in pregnancy results in miscarriage and birth defects – avoiding pregnancy or ceasing Accutance use before conception eliminates harmful exposure.
- **Oral anticoagulants:** Warfarin is a teratogen; medications can be switched before the onset of pregnancy
- **Smoking:** Completing smoking cessation before pregnancy can prevent smoking-associated adverse outcomes include preterm birth, low birth weight

Lifecourse Perspective to Improve Pregnancy Outcomes

The lifecourse approach proposes that disparities in birth outcomes are the consequences of differential developmental trajectories set forth by early life experiences and cumulative allostatic load over the life course.

Source: Lu MC, Halfon N. Racial and ethnic disparities in birth outcomes: a life-course perspective. Matern Child Health J. 2003;7:13-30.

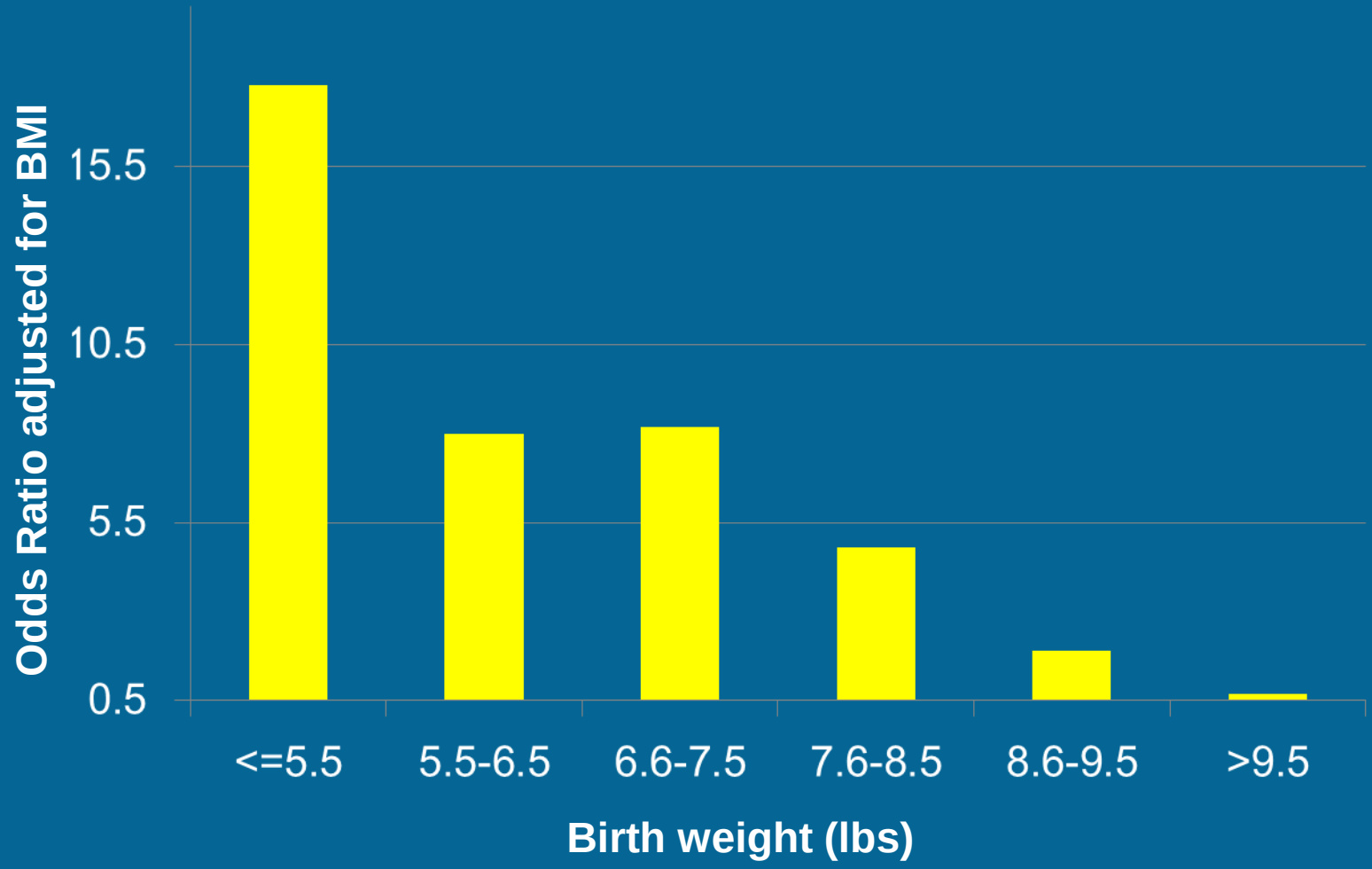
Lifecourse Perspective to Improve Pregnancy Outcomes

Scientific evidence from two leading longitudinal models:

- **The early programming model** - exposures in early life could influence future reproductive potential
- **The cumulative pathways model** - decline in reproductive health results from cumulative wear and tear to the body's allostatic systems
- These two models are not mutually exclusive

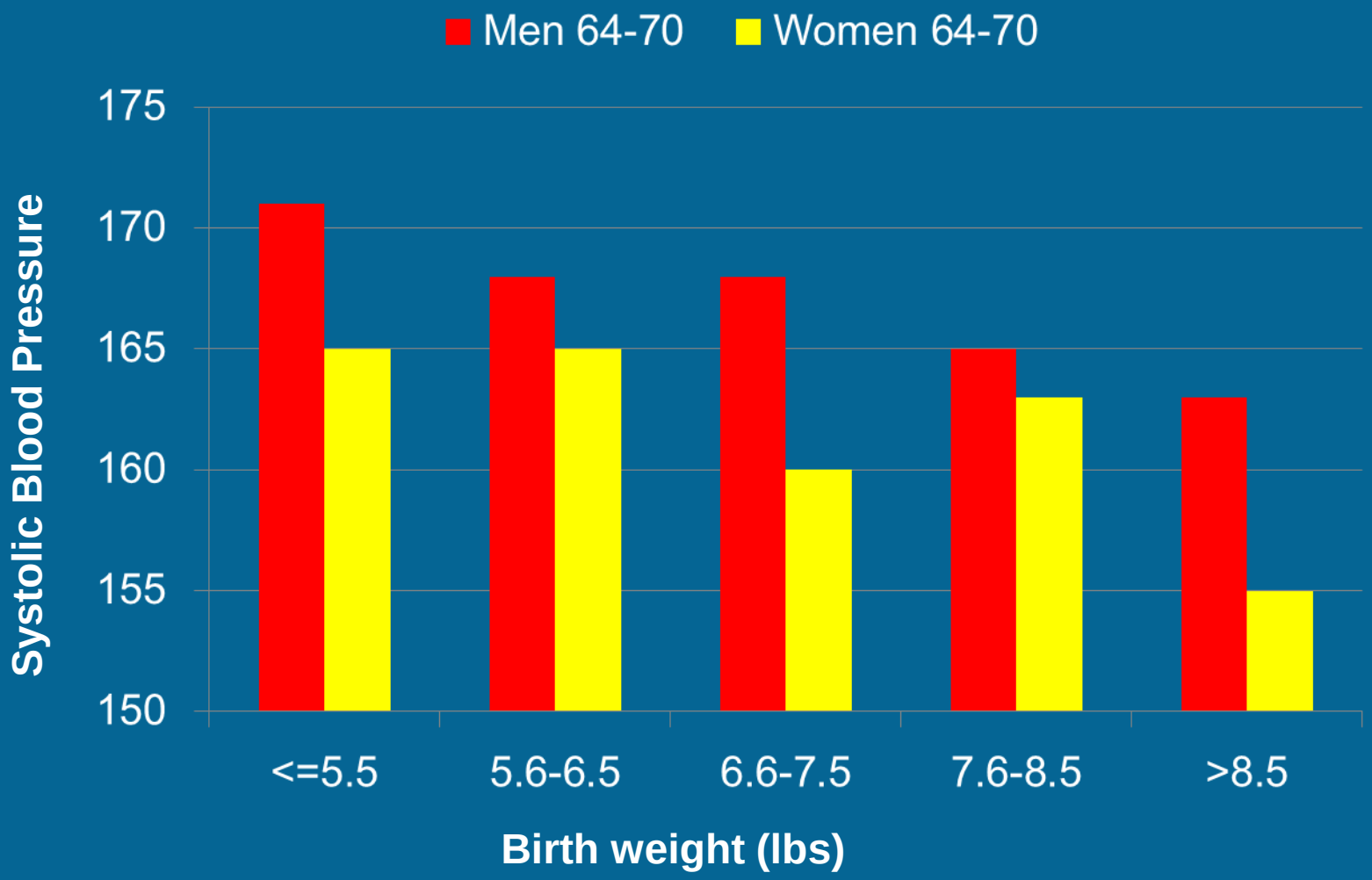
Source: Lu MC, Halfon N. Racial and ethnic disparities in birth outcomes: a life-course perspective. Matern Child Health J. 2003;7:13-30.

Low Birthweight is associated with Syndrome X (Type 2 diabetes, hypertension and hyperlipidaemia)



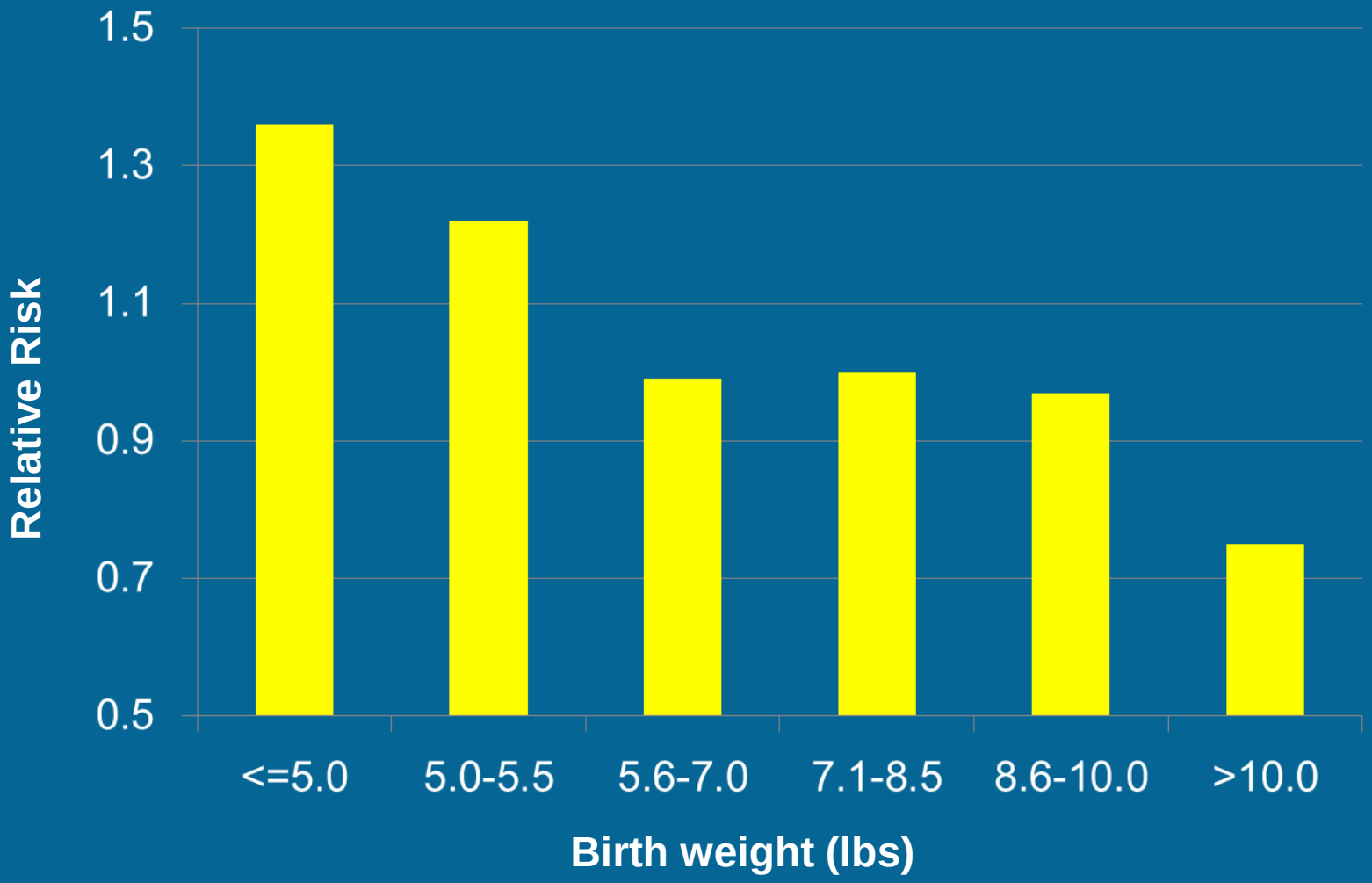
Barker DJP, Hales CN, Fall CHD, Osmond C, Phipps K, Clark PMS. Type 2 (non-insulin-dependent) diabetes mellitus, hypertension and hyperlipidaemia (Syndrome X): Relation to reduced fetal growth. Diabetologia 1993;36:62-67.

Low Birthweight is associated with hypertension



Law CM, de Swiet M, Osmond C, Fayers PM, Barker DJP, Cruddas AM, et al. Initiation of hypertension in utero and its amplification throughout life. Br Med J 1993;306:24-27.

Low Birthweight is assocaited with non-fatal coronary heart disease



Rich-Edwards JW, Stampfer MJ, Manson JE, Rosner B, Hankinson SE, Colditz GA et al. Birth weight and risk of cardiovascular disease in a cohort of women followed up since 1976. Br Med Jr 1997;315:396-400.

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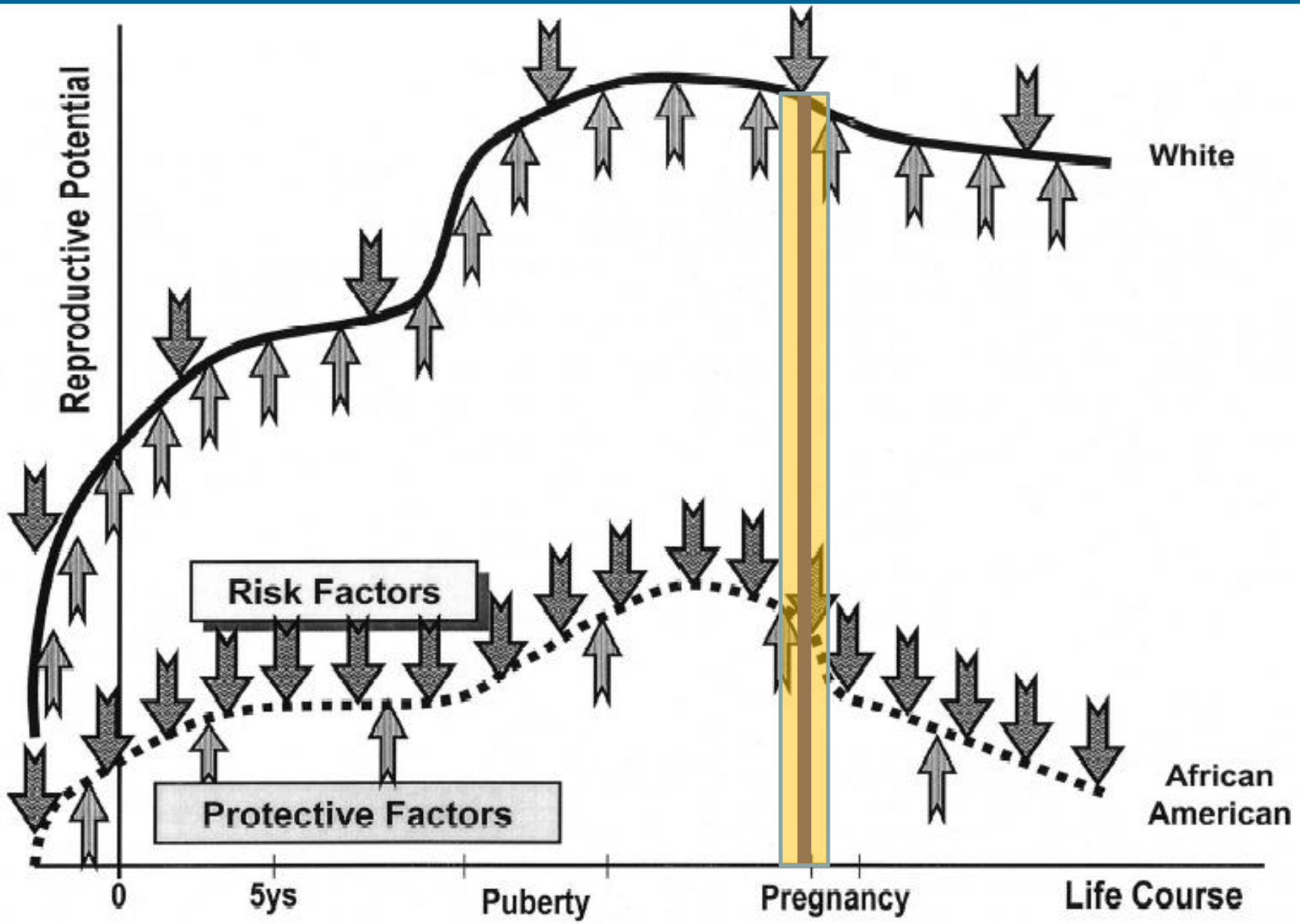
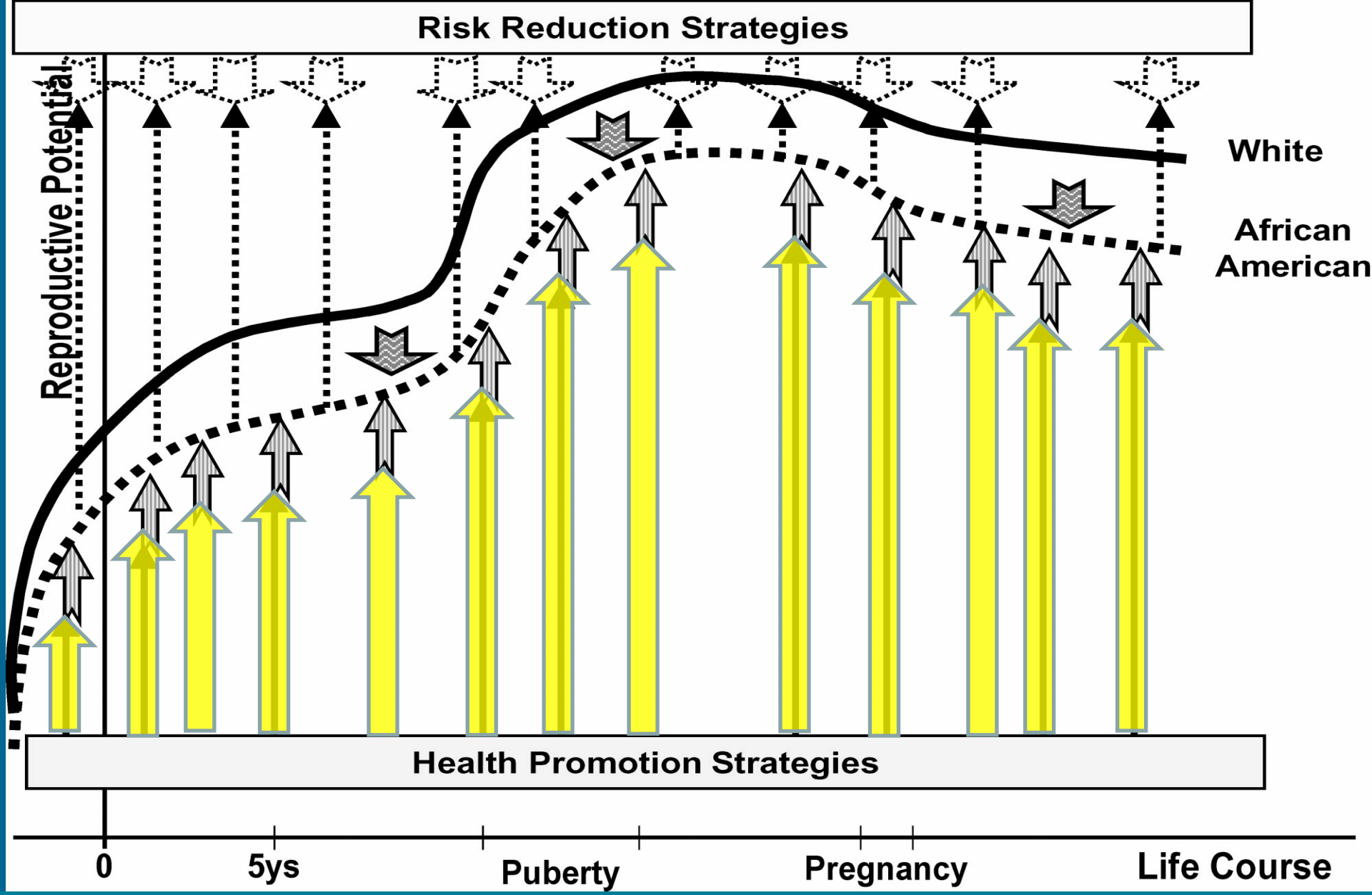


Source: Lu MC, Halfon N. Racial and ethnic disparities in birth outcomes: a life-course perspective. Matern Child Health J. 2003;7:13-30.



Source: Lu MC, Halfon N. Racial and ethnic disparities in birth outcomes: a life-course perspective. Matern Child Health J. 2003;7:13-30.

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Lifecourse Perspective to Improve Pregnancy Outcomes

A 12-point plan to close the Black-White gap in birth outcomes - 1:

Address the needs of AA women for **quality healthcare across the lifespan:**

1. Provide interconception care to women with prior adverse pregnancy outcomes,
2. Increase access to preconception care to AA women,
3. Improve the quality of prenatal care, and
4. Expand healthcare access over the life course

Lu MC, Kotelchuck M, Hogan V, Jones L, Wright K, Halfon N. CLOSING THE BLACK-WHITE GAP IN BIRTH OUTCOMES: A LIFE-COURSE APPROACH. Ethnicity & Disease, Volume 20, Winter 2010 pp S2-62 to S2-76

Lifecourse Perspective to Improve Pregnancy Outcomes

A 12-point plan to close the Black-White gap in birth outcomes - 2:

Enhance family and community systems that may influence the health of pregnant women, families, and communities.

5. Strengthen father involvement in AA families,
6. Enhance coordination and integration of family support services,
7. Create reproductive social capital in AA communities, and
8. Invest in community building and urban renewal

Lu MC, Kotelchuck M, Hogan V, Jones L, Wright K, Halfon N. CLOSING THE BLACK-WHITE GAP IN BIRTH OUTCOMES: A LIFE-COURSE APPROACH. Ethnicity & Disease, Volume 20, Winter 2010 pp S2-62 to S2-76

Lifecourse Perspective to Improve Pregnancy Outcomes

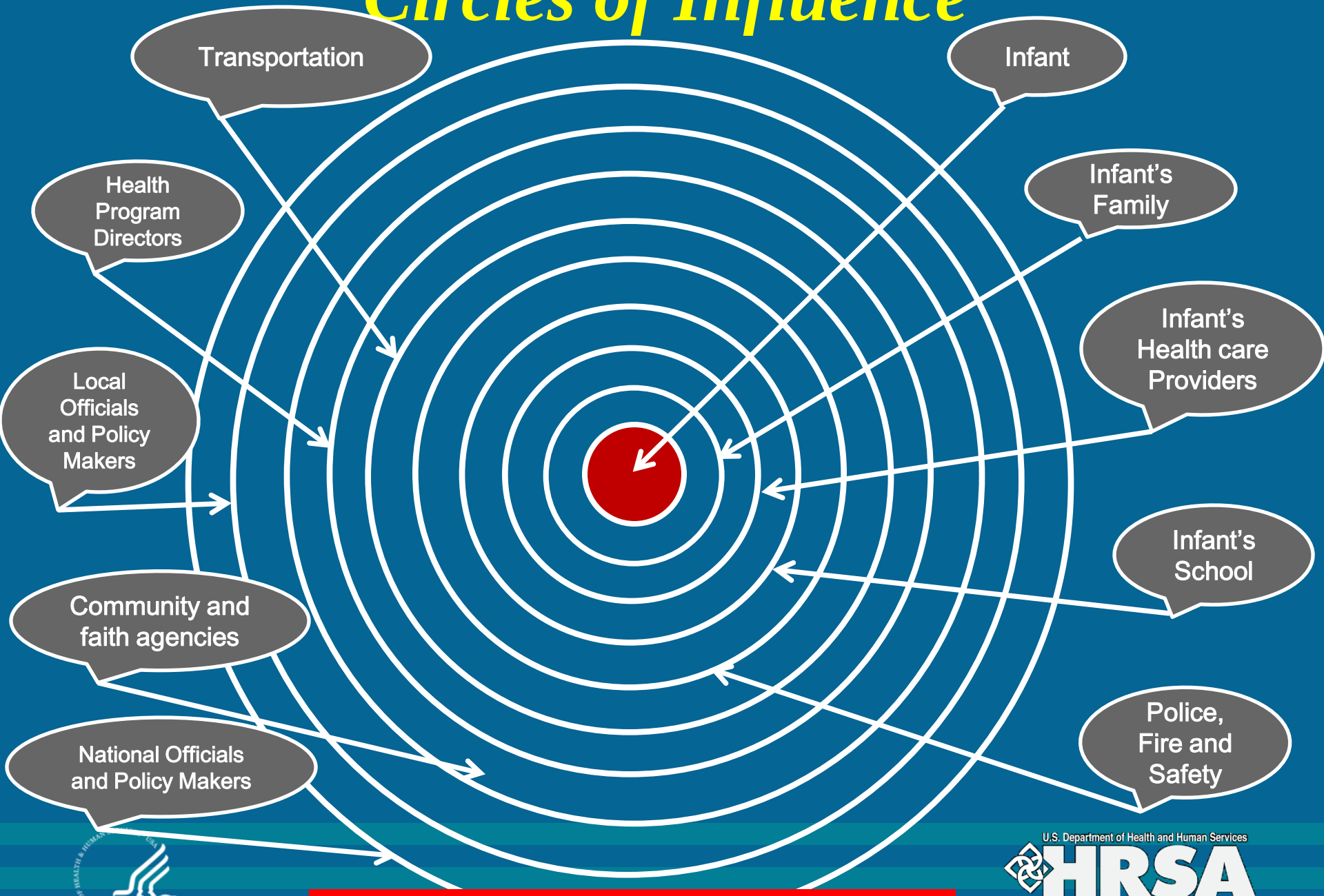
A 12-point plan to close the Black-White gap in birth outcomes - 3:

Address the social and economic inequities that underlie much of health disparities:

9. Close the education gap,
10. Reduce poverty among AA families,
11. Support working mothers and families, and
12. Undo racism

Lu MC, Kotelchuck M, Hogan V, Jones L, Wright K, Halfon N. CLOSING THE BLACK-WHITE GAP IN BIRTH OUTCOMES: A LIFE-COURSE APPROACH. Ethnicity & Disease, Volume 20, Winter 2010 pp S2-62 to S2-76

*Circles of Influence**



* Courtesy of Dr. Magda Peck, CityMatCH

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Health Resources and Services Administration

Women's and Maternal Health - HRSA Initiatives

Women's Health Preventive Services Clinical Visit Guidelines

- Support the development of clinical preventive health guidelines for well woman visit
- Compile the guidelines into a succinct resource
- Disseminate these guidelines and promote their adoption into standard clinical practice among women's health care providers

Women's and Maternal Health - HRSA Initiatives
National Maternal Health Initiative

- Promote coordination and collaboration within HRSA, across HHS agencies and with professional and private organizations.

- Five priorities:
  - Improve women's health before, during, and after pregnancy
  - Improve systems of maternity care including clinical and public health systems
  - Improve public awareness and education
  - Improve research and surveillance
  - Improve the quality and safety of maternity care

Women's and Maternal Health - HRSA Initiatives Improving Maternal Health and Safety

- Purpose: reduce the number of maternal deaths and/or preventable severe morbidities
- Goal: engaging health care providers, State leaders, hospitals, payers, and consumers
- Strategies:
  - Promote knowledge of and access to preconception and interconception care through a provider education campaign
  - Engage stakeholders in efforts to reduce primary cesarean delivery
  - Facilitate the adoption of the maternal safety bundle through development of a CoIIN of early adopter states

Collaborative Innovation Networks

A CoIN, or **Collaborative Innovation Network**, is a team of self-motivated people with a collective vision, enabled by the Web to collaborate in achieving a common goal by sharing ideas, information, and work.

Gloor PA. Swarm Creativity: Competitive Advantage through Collaborative Innovation Networks. New York: Oxford University Press, 2006.

Collaborative Innovation Networks

"If you and I swap a dollar, you and I still each have a dollar. If you and I swap an idea, you and I have two ideas each."

By openly sharing ideas and work, a team's creative output is exponentially more than the sum of the creative outputs of all the individual team members.

Source: Gloor PA. Swarm Creativity: Competitive Advantage through Collaborative Innovation Networks. New York: Oxford University Press, 2006.

Key Elements of a CoIN

- Being a “cyber-team”
- Innovation
- Work patterns characterized by meritocracy, transparency, and openness

Source: Gloor PA. Swarm Creativity: Competitive Advantage through Collaborative Innovation Networks. New York: Oxford University Press, 2006.

The Infant Mortality CoIIN

The Collaborative *Improvement* & Innovation Network to Reduce Infant Mortality

- Designed to help States innovate and improve their approaches to improving birth outcomes

- Initiated March 2012 as a mechanism to support the adoption of collaborative learning and quality improvement principles and practices to reduce infant mortality and improve birth outcomes.

COIN: Strategies & Structure

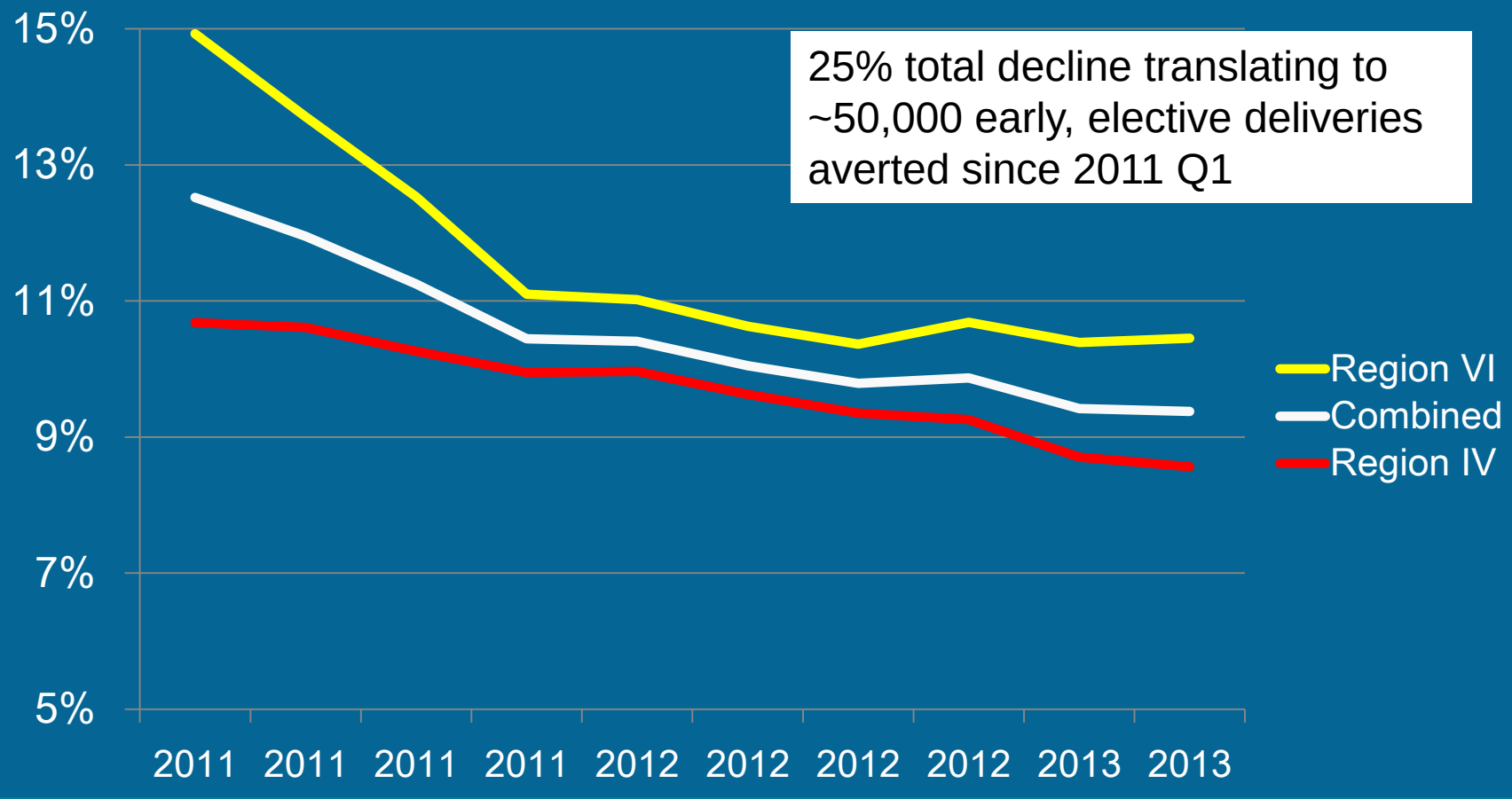
5 Strategy Teams

1. Reducing early elective deliveries <39 weeks (ED);
2. Enhancing interconception care in Medicaid (ICC);
3. Reducing SIDS/SUID (SS);
4. Increasing smoking cessation among pregnant women (SC);
5. Enhancing perinatal regionalization (RS).

Teams

- 2-3 Leads (Content Experts);
- Data and/or Method Experts
- Staff support (MCHB & partner organizations)
- State representatives
- Shared Workspace
- Data Dashboard

Non-Medically Indicated Early Term Deliveries Among Singleton, Term Deliveries*



* Based on provisional birth certificate data; excludes women with pre-existing conditions

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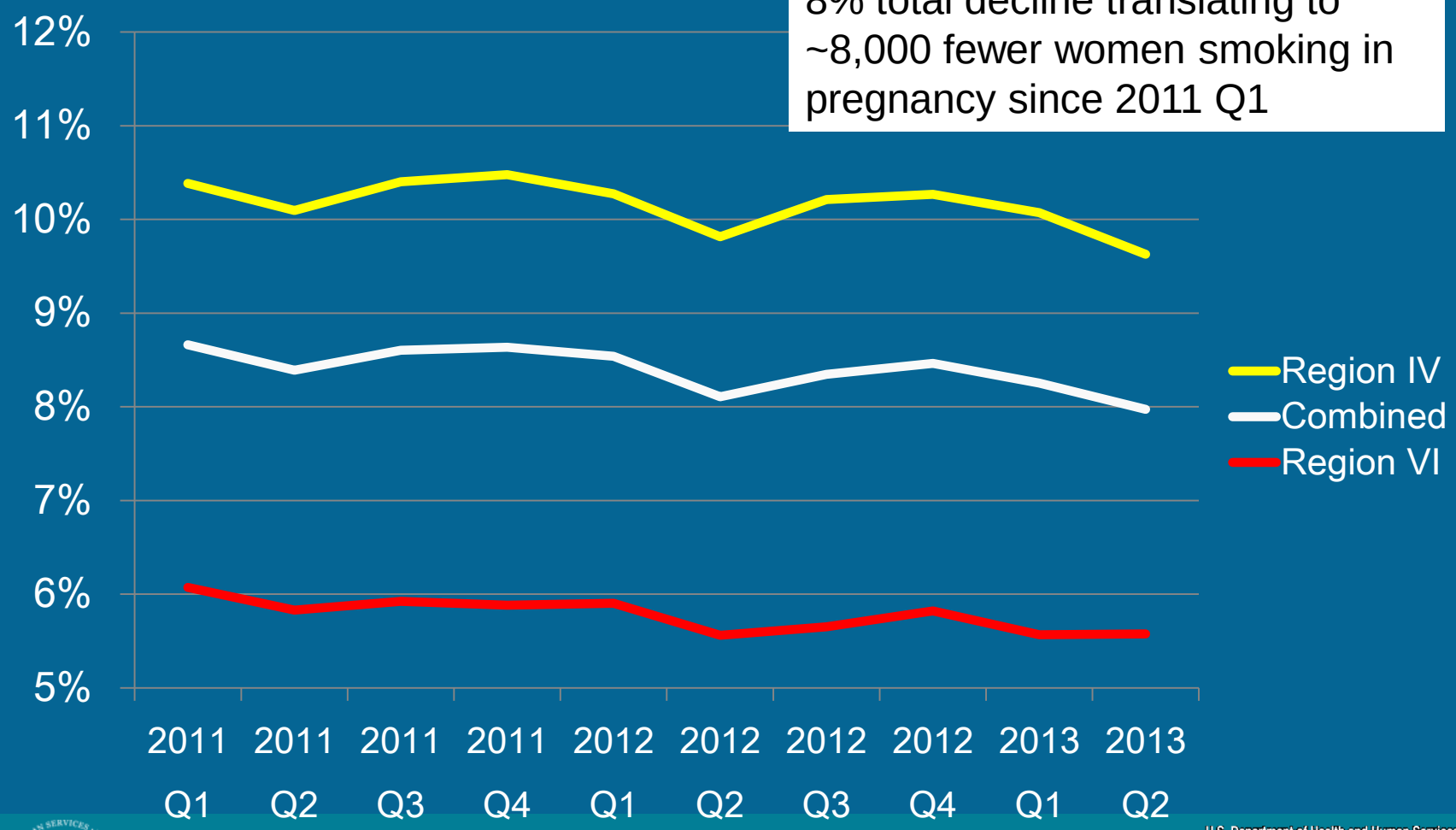
Smoking During Pregnancy*

8% total decline translating to ~8,000 fewer women smoking in pregnancy since 2011 Q1



* Based on provisional birth certificate data reflecting smoking in any trimester; 3 States using unrevised birth certificate; 1 State excluded that did not report 2013 data

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Other COIIN Accomplishments

- Interconception Care: 7 out of 8 states introduced polices to improve interconception care access or content
- Perinatal Regionalization: several states are working together to address levels of care designations
- Safe Sleep: monthly collaborative learning sessions to share best practices and innovations

Collective Impact

A systemic approach to social impact that focuses on the relationships between organizations and the progress toward shared objectives.

Collective Impact Initiatives are:

- Long-term commitments
- By a group of important actors
- From different sectors
- To a common agenda
- For solving a specific social problem

Source: Kania J, Kramer M. Collective Impact. Stanford Social Innovation Review. Winter 2011 http://www.ssireview.org/articles/entry/collective_impact Accessed march 2014

Collective Impact

"The power of collective impact lies in the heightened vigilance that comes from multiple organizations looking for resources and innovations through the same lens, the rapid learning that comes from continuous feedback loops, and the immediacy of action that comes from a unified and simultaneous response among all participants."

Source: Kania J, Kramer M. Embracing emergence: how collective Impact addresses complexity. Stanford Social Innovation Review. Jan 21, 2013 http://www.ssireview.org/articles/entry/collective_impact Accessed March 2014

Preconditions for Collective Impact

1. An influential champion to bring cross-sector leaders together and keep their active engagement over time

2. Adequate financial resources to last for at least two to three years

3. Urgency for change around an issue

Source: Kania J, Kramer M. Collective Impact. Stanford Social Innovation Review. Winter 2011 http://www.ssireview.org/articles/entry/collective_impact Accessed march 2014

Conditions of Collective Success

1. A common agenda
2. Shared measurement systems
3. Mutually reinforcing activities
4. Continuous communication, and
5. Backbone support organizations

Source: Kania J, Kramer M. Collective Impact. Stanford Social Innovation Review. Winter 2011 http://www.ssireview.org/articles/entry/collective_impact Accessed march 2014

Keeping collective impact alive

Two key elements:

- Backbone Organization
- Cascading Levels of Linked Collaboration

Source: Turner S, Merchant K, Kania J, Martin E. Understanding the Value of Backbone Organizations in Collective Impact: Part 1. Stanford Social Innovation Review. Jul. 17, 2012 http://www.ssireview.org/blog/entry/understanding_the_value_of_backbone_organizations_in_collective_impact_1 accessed march 2014

Backbone Organization

Backbone organizations require two main ingredients:

1. **Strong adaptive leadership**
2. **Sufficient resources** to propel collective impact efforts

Source: Turner S, Merchant K, Kania J, Martin E. Understanding the Value of Backbone Organizations in Collective Impact: Part 1. Stanford Social Innovation Review. Jul. 17, 2012 http://www.ssireview.org/blog/entry/understanding_the_value_of_backbone_organizations_in_collective_impact_1 accessed march 2014

Backbone Organization

Backbone organizations serve six essential functions:

1. Providing overall strategic direction
2. Facilitating dialogue between partners
3. Managing data collection and analysis
4. Handling communications
5. Coordinating community outreach, and
6. Mobilizing funding

Source: Turner S, Merchant K, Kania J, Martin E. Understanding the Value of Backbone Organizations in Collective Impact: Part 1. Stanford Social Innovation Review. Jul. 17, 2012 http://www.ssireview.org/blog/entry/understanding_the_value_of_backbone_organizations_in_collective_impact_1 accessed march 2014

Backbone Organization

Effective Backbone Leadership:

1. **Visionary**
2. **Results oriented**
3. **Collaborative, relationship builder**
4. **Focused, but adaptive**
5. **Charismatic and influential communicator**
6. **Politic**
7. **Humble**

Source: Turner S, Merchant K, Kania J, Martin E. Understanding the Value of Backbone Organizations in Collective Impact: Part 3. Stanford Social Innovation Review. Jul. 19, 2012 http://www.ssireview.org/blog/entry/understanding_the_value_of_backbone_organizations_in_collective_impact_3 accessed March 2014

Healthy Start CAN Drive Collective Impact

Healthy Start programs are uniquely situated to:

- **Champion the infant mortality cause in their communities**
- **Serve as backbone organizations to ensure collective impact**
- **Implement the main functions of a backbone organization**

Source: Turner S, Merchant K, Kania J, Martin E. Understanding the Value of Backbone Organizations in Collective Impact: Part 3. Stanford Social Innovation Review. Jul. 19, 2012 http://www.ssireview.org/blog/entry/understanding_the_value_of_backbone_organizations_in_collective_impact_3 accessed March 2014

THE NATIONAL HEALTHY START PROGRAM
History

- Established in 1991 as a presidential initiatives
- Started as a 5-year demonstration project
- Targets communities with high infant mortality rates and other adverse perinatal outcomes
- Initially focused on community innovation and creativity
- Today, HRSA supports 105 grants in 196 counties, in 39 States, DC, Puerto Rico

THE NATIONAL HEALTHY START PROGRAM
Progress - Program

- In 2010, over 90% of all healthy start sites were implementing all 9 core components of the program

- Most offered additional services:

  Home visiting, breastfeeding support and education, smoking and other tobacco use cessation, healthy weight services, male and family involvement, domestic/intimate partner violence screening, and child abuse screening or services

THE NATIONAL HEALTHY START PROGRAM
Progress - Outcomes

- Perinatal outcomes significantly improved:
  - *IMR = 4.78 compared with 6.15 nationally, 11.63 for African Americans*
  - *Low birth-weight rate =10% compared with 8.1% nationally, and 13.53% for African Americans*
  - *Very low birth-weight rate 1.7% compared with 1.45% nationally, and 2.98% for African Americans*

Why Change Healthy Start?

- Recommendations of external evaluations
- Recommendations of the Secretary's Advisory Committee on Infant Mortality
- To keep pace, align with, coordinate efforts, and support current Department and Agency programs and priorities
- To integrate current and emerging evidence-based approaches to improving perinatal outcomes

Main Changes to Healthy Start Healthy Start Approaches

- Improve Women's Health
- Promote Quality Services
- Strengthen Family Resilience
- Achieve Collective Impact
- Increase Accountability through Quality Improvement, Performance Monitoring, and Evaluation

Implementing Healthy Start 3.0

- Two new programs are being launched:
  - Supporting Healthy Start Performance Project
  - Healthy Start Information System

Supporting Healthy Start Performance Project

- SHSPP will promote the uniform implementation of Healthy Start by:
  - Ensuring skilled, well qualified workers at all levels of the program
  - Identifying and better defining effective services and interventions
  - Offering mentoring, education, and training to staff delivering these interventions and services
  - Providing shared resources

Healthy Start Information System

- Data Dashboard for real-time monitoring of progress of activities

- Individual client data, program data, and community outcome data for:
  - Continuous quality improvement
  - Provision of targeted technical assistance, and
  - Ongoing local and national evaluations

Healthy Start CAN Drive Collective Impact

Healthy Start programs are uniquely situated to:

- **Champion the infant mortality cause in their communities**
- **Serve as backbone organizations to ensure collective impact**
- **Implement its six main functions of a backbone organization:**
  - Provide overall strategic direction
  - Facilitate dialogue between partners
  - Manage data collection and analysis
  - Handle communications
  - Coordinate community outreach, and
  - Mobilize funding

Source: Turner S, Merchant K, Kania J, Martin E. Understanding the Value of Backbone Organizations in Collective Impact: Part 3. Stanford Social Innovation Review. Jul. 19, 2012 http://www.ssireview.org/blog/entry/understanding_the_value_of_backbone_organizations_in_collective_impact_3 accessed March 2014

For More Information

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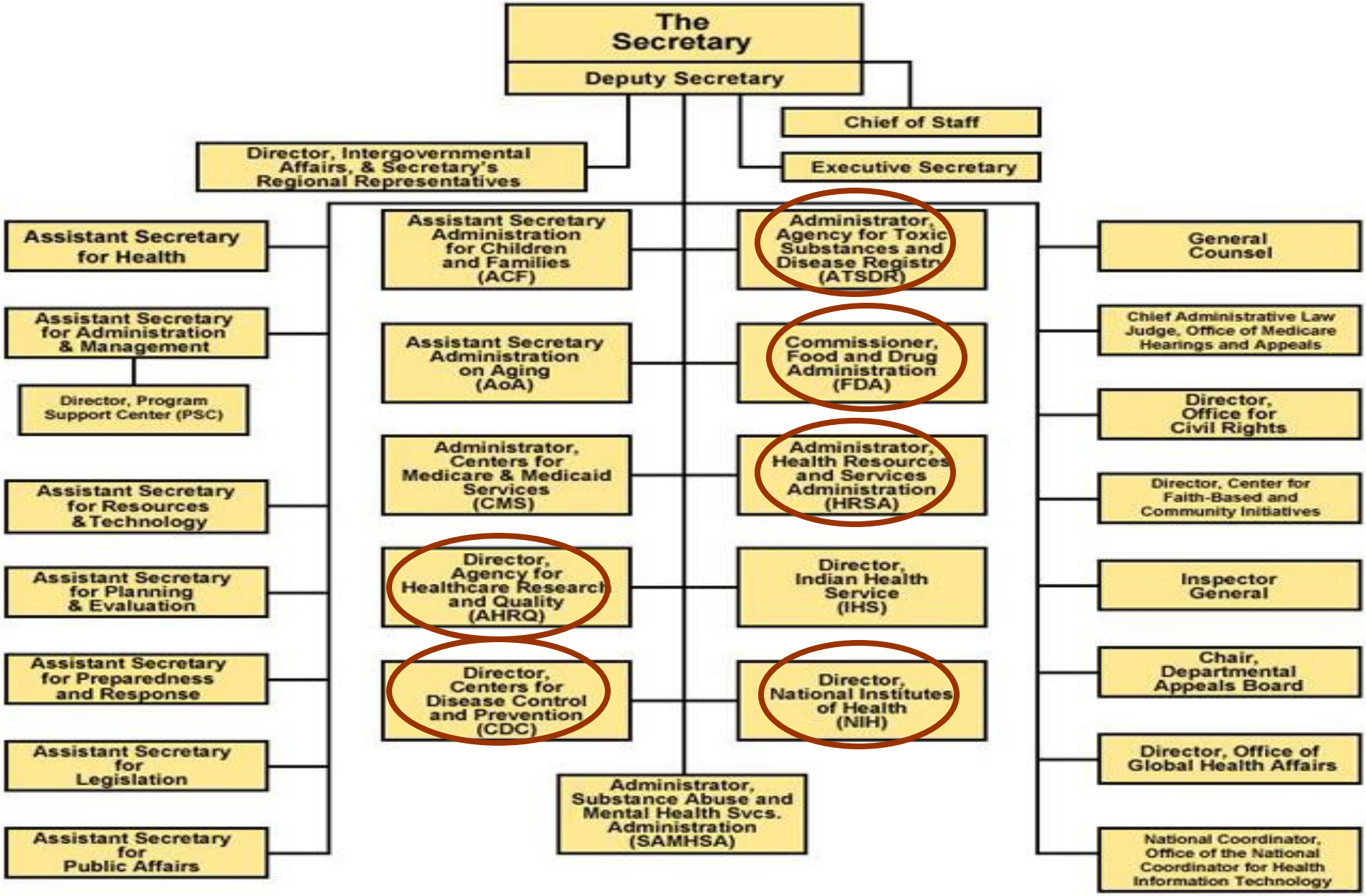
The Secretary
Deputy Secretary
Chief of Staff
Executive Secretary
Director, Intergovernmental Affairs, & Secretary's Regional Representatives
Assistant Secretary for Health
Assistant Secretary for Administration & Management
Director, Program Support Center (PSC)
Assistant Secretary for Resources & Technology
Assistant Secretary for Planning & Evaluation
Assistant Secretary for Preparedness and Response
Assistant Secretary for Legislation
Assistant Secretary for Public Affairs
Assistant Secretary Administration for Children and Families (ACF)
Assistant Secretary Administration on Aging (AoA)
Administrator, Centers for Medicare & Medicaid Services (CMS)
Director, Agency for Healthcare Research and Quality (AHRQ)
Director, Centers for Disease Control and Prevention (CDC)
Administrator, Substance Abuse and Mental Health Svcs. Administration (SAMHSA)
Administrator, Agency for Toxic Substances and Disease Registry (ATSDR)
Commissioner, Food and Drug Administration (FDA)
Administrator, Health Resources and Services Administration (HRSA)
Director, Indian Health Service (IHS)
Director, National Institutes of Health (NIH)
General Counsel
Chief Administrative Law Judge, Office of Medicare Hearings and Appeals
Director, Office for Civil Rights
Director, Center for Faith-Based and Community Initiatives
Inspector General
Chair, Departmental Appeals Board
Director, Office of Global Health Affairs
National Coordinator, Office of the National Coordinator for Health Information Technology

U.S. Dept. Health and Human Services
Roles and Scope of Work

NIH
Research
Clinical and basic research
Training

FDA
Regulatory
Assures product safety and efficacy
New product approval

HRSA
Access to Care
Provides essential access to care

Reimbursement & financial issues

AHRQ
Quality of Care
Supports health services research initiatives that seek to improve the quality of health care

CDC
Prevention and Control
Monitoring, investigation, research, program development, implementation and evaluation, health promotion, training and capacity building

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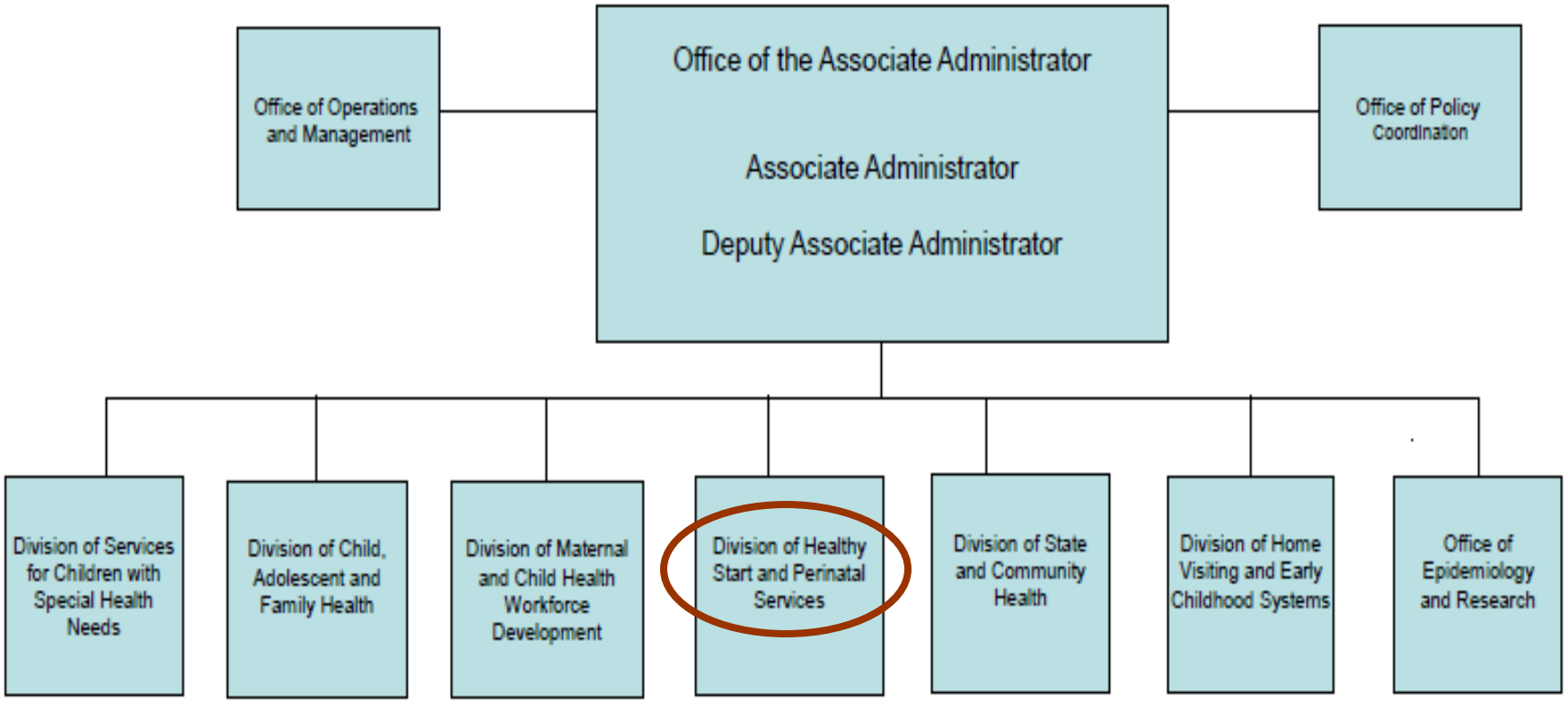
Maternal and Child Health Bureau



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